

SCHOOL CAMPS

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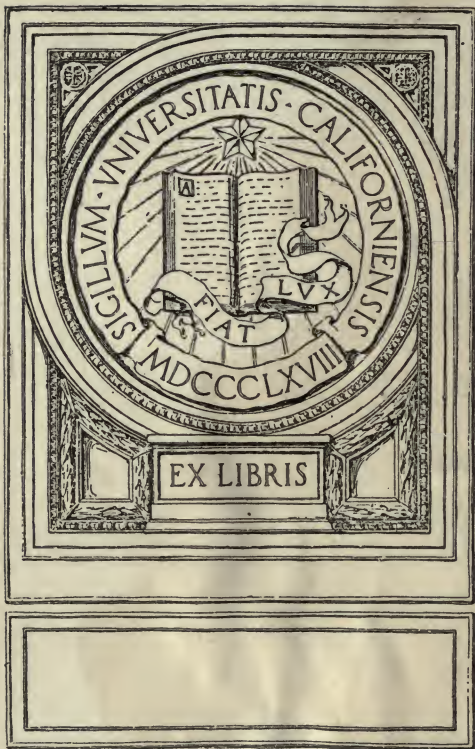


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SCHOOL CAMPS

Their Value and Organization

BY

RICHARD G. HEWITT, B.Sc., F.G.S.

AND

LEWIS ELLIS, ART MASTER

FINAL CERTIFICATE WOODWORK, LONDON CITY AND
GUILDS INSTITUTE ; TEACHER'S HIGHER CERTIFICATE WOODWORK
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ANNALS

PREFACE

THIS handbook has been compiled in response to numerous appeals for advice as to the organization and cost of a school camp. Whilst it specially deals with camps directly connected with the various types of schools, much of the matter is nevertheless applicable to the requirements of similar organizations of boys and girls.

Camp management admits of much elasticity of method, and the authors merely offer *their* methods to be taken as recommendations based upon ten years of camping experience with boys, the ages of whom varied from twelve to sixteen years.

Unfortunately the present artificial and unstable prices make it impossible to give reliable figures of the cost of camps to-day. At the same time, this book would be lacking in a very essential point if it overlooked altogether the matter of cost. The authors have therefore considered that the safest plan is to give pre-war rates only, for although these prices are now quite inadequate they form a fairly trustworthy basis upon which to make comparative estimates for the present time.

We wish to thank Mr. C. H. Dennis, Sub-Inspector of Schools, and Mr. R. Montgomery, B.A., for the kindly interest they have taken in the preparation of the book.

R. G. H.

L. E.

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EDUCATION ACT, 1918.

8 & 9 Geo. 5, Ch. 39, Section 17.

‘For the purposes of supplementing and reinforcing the instruction and social and physical training provided by the public system of Education, and without prejudice to any other powers, a local education authority for the purposes of Part III of the Education Act of 1902, as respects children attending public elementary schools, and a local education authority for the purposes of Part II of that Act, as respects other children and young persons over the age of eighteen attending educational institutions, may, with the approval of the Board of Education, make arrangements to supply or maintain or aid the supply or maintenance of—

(a) Holiday or school camps, especially for young persons attending continuation schools;

(b) Centres and equipment for physical training, playing fields (other than the ordinary playgrounds of public elementary schools not provided by the local educational authority), school baths, school swimming baths;

(c) Other facilities for social and physical training in the day or evening.’

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INTRODUCTION

MOST prominent persons who take an active interest in education agree that school camps are a valuable educational factor and are destined to play an important part in the life of every school. The Board of Education has recognized this fact, and now offers such facilities as enable Education Committees to encourage the formation of school camps.

Camp life is not necessarily the 'simple life', and though this book may be of assistance to those who advocate and intend to camp on the lines of the 'simple life', it is with the more elaborate type of school camp that the book chiefly deals. The authors may be accused of too much elaboration; it may be even suggested that their desire is to make the camp a 'home from home'—that is far from their work. No treatment can err in minuteness from the organizer's point of view, and we have not elaborated details with the idea that they are necessary for any particular camp, but rather in order to offer a wealth of material from which alternatives may be chosen. Again, the authors have learnt from painful experience how fatal it is to the smooth working of a camp to neglect or overlook that which, when viewed from the class-room, appeared to be of quite trivial importance. We have therefore not hesitated to draw attention to minor details which may so easily escape notice.

Camp work is hard but none the less enjoyable and

beneficial. The week or fortnight under canvas is the culminating point of the year's work and not a period detached from the forty weeks of the school year. Though it may not appear in the time-table, school camp will nevertheless be as much a real subject of the Curriculum as French or Arithmetic, and the authors trust that this book may be a guide and an encouragement to many to take up the work.

The difficulties are not really great, the risks are small, the rewards ample. Camp helps to break down that artificial barrier so liable to be set up between teachers and scholars: the teacher becomes a man first, a teacher second; the scholar becomes a boy first, a pupil second, and thus more rational points of view emerge from both sides. Even though the camp period be short its effect is never entirely removed, and so always helps forward the teachers' ideal—the building of character, the making of men.

CHAPTER I

GENERAL OUTLINE

Aims — Scope — Preliminary arrangements.

AN ordinary day school is almost necessarily an indoor institution. That this is so is due largely to two causes, firstly the vagaries of the English climate, secondly the necessity of giving to scholars a definite amount of theoretical information. The consequent cramping effect upon the mind, the lack of opportunity to develop character, and the difficulty of establishing sympathy and mutual understanding between scholar and teacher have always been appreciated. Attempts have been made to overcome these deficiencies by means of outdoor lessons and excursions, and teachers have realized the value of such work but have also recognized its shortcomings. What a much greater field of work could be brought within their grasp if the excursion lasted for a week instead of half a day! The school camp develops this idea and introduces an additional phase into school life.

A teacher who is to be really successful must know his pupils thoroughly. At some time or other he should be in a position to place himself on the same plane as theirs, and camp is the one period of the year when teacher and scholar spend the whole twenty-four hours of the day under common conditions. In camp, traits of character not exhibited at school are brought out. The life shows up the real boy,

his weaknesses on the one hand, the most noble parts of his character on the other, and so the teacher is able to get a more comprehensive knowledge of each boy than would otherwise be possible. Also the teacher, for the moment, takes upon himself the duties of the parent; consultations often ensue which lead to mutual understandings upon the one common topic—the boy—and nothing is more valuable than the resultant sympathetic co-operation between teacher and parent.

The term 'school camp' cannot be treated too broadly, it should permeate the curriculum of the school. Camp week is the centre upon which the energies are focused, the real goal of the work done throughout the year. It follows that camp is not merely a holiday centre but a centre where a happy combination of pleasure and work exists, where the joy of life, the acquirement of knowledge, and the accumulation of experiences are blended. In preparation for the event there are abundant opportunities for juvenile activity to have unbounded scope; not only the activity of play but the activity of work may be so merged that the result is pleasurable labour of the highest order. Practical constructive work is done, and at the same time a corporate spirit is cultivated in the production of many of the articles.

Constructive work will confine itself chiefly to the Manual Room, and year by year there is always much to do in this department. The first year's work involves the making of many very necessary articles to form the nucleus of the camp equipment. When camp has become an established institution each year's new ideas will have to be materialized, general wear and tear will have to be made good, and equipment will have to be extended to meet the growing demands of increased numbers. It is surprising how many matters

connected with camp arise in the daily work of the school, all of which are of direct personal interest to the scholar because they concern the welfare of the camp. For example, Science can add its quota; on more than one occasion serious attempts have been made by the boys at the right stage to supply the camp with soap made in the laboratory. The making of small accumulators for lighting a tent has also received much attention at various times. In such cases the success has usually been indifferent, but, after all, does that really matter?

History, Geography, Literature, and Nature Study all have their place in the work of preparation. Quite a large area can be covered in the course of seven or eight days on well-chosen excursions, and if the site selected is one abounding in literary and historical associations or special natural features, points which have been previously dealt with in school can be amplified and fixed.

Preparations for the annual camp are usually begun immediately on re-assembling after the Christmas holidays. New boys and others not previously eligible have to receive full particulars. These can be given in a short address and enlarged upon where possible by a lantern lecture (the latter may not be feasible when initiating a camp, but later one generally finds photographers among the party and a collection of 'snaps' will form the nucleus of a set of camp lantern slides). A cyclostyled or printed sheet giving particulars of the scheme should be distributed amongst the boys for them to take home for their parents' perusal. Attached to this sheet should be a form of declaration to be signed by the parent and returned to school as a guarantee that the boy's attendance meets with approval. Below is a specimen of the type of form suggested. It is a copy of the one used by the authors :

May 1913.

SEVENTH ANNUAL CAMP.

The school camp will be held at Malham from July 28 to August 4, and will be in charge of the Staff.

The inclusive cost will be 17s. per boy, which must be paid before Friday, July 21.

Each boy should provide himself with the following articles, which are absolutely essential :

- 1 Change of clothes and stockings.
- 1 Overcoat or mackintosh.
- 1 Pair of strong boots.
- 1 Pair of shoes or slippers.
- 1 Blanket.
- 1 Towel.
- 1 Comb, brush, and toothbrush.
- 1 Piece of soap.
- 2 Enamelled plates.
- 1 Mug (enamelled), knife, spoon, and fork.
- 1 Good note-book, sketch-book, pencil.
- 1 Tin of vaseline.

The boys will be accommodated in bell tents, and each boy will be supplied with one large blanket. No crockery should be taken as it is so easily damaged. Boys will be expected to wear the school cap and jersey on all possible occasions, and old clothes will be more serviceable than recent ones.

The following routine will be adhered to as closely as possible :

7.0 a.m.	Réveillé.
7.45 a.m.	Tent inspection.
8.0 a.m.	Breakfast.
9.30 a.m.—1 p.m.	Excursion.
1 p.m.	Dinner.
1.30 p.m.—2.30 p.m.	Rest period.
2.30 p.m.—5 p.m.	Games.
5 p.m.—5.30 p.m.	Tea.
5.30 p.m.—8.30 p.m.	Free time.
8.30 p.m.	Supper.
10 p.m.	Lights out.

Boys are at liberty to leave the camp between 5.30 p.m. and 8.30 p.m. without obtaining special permission. At no other time will boys be permitted to leave camp except in following out camp routine.

Indiscriminate bathing will not be allowed, but will only take place at the properly appointed time and under the supervision of the masters.

Owing to the great responsibility devolving upon the masters it is hoped that parents will co-operate with them in inculcating implicit obedience to orders on the part of the boys. Boys are accepted for camp on the understanding that the regulations will be strictly observed; they are expected to behave as gentlemen, and respect the school colours whether under supervision or not.

Details relating to time of starting, provision for luggage, and camp address will be given later.

I am willing that my boy shall join the school camp and ^{am forwarding} have forwarded ^{seventeen shillings,} payment for same.

(Signed.)

In order to render the cost as little burdensome as possible to the parent a camp bank may be instituted. If opened four or five months beforehand it will enable parents to contribute a weekly sum to defray the cost of the outing, and it will also encourage thrift amongst the boys themselves if they are permitted to add their own small quota. They naturally require a few shillings to spend whilst away from home, and this can be accumulated by periodical contributions from their spending money. One boyish anxiety is that his pocket money may be lost owing to the lack of adequate means of safeguarding it under camp conditions. This trouble is overcome if his capital is invested in the Bank and he is at liberty to draw upon it daily or as required. The 'bank manager' will have the money with him in camp and can arrange a time for daily disbursements.

Small sums are sometimes required by the Staff to pay small railway fares which are necessary in the case of some of the excursions, and if these sums are taken from a boy's account as wanted the trouble of collecting it on the spot is avoided. Some system of pass books or cards for registering the deposits and withdrawals will suggest itself to the organizers.

Under camp conditions the teacher is on duty practically all the twenty-four hours of the day. The children are always present, and responsibility never ceases from the moment of entraining to the time of dispersal to the children's homes. To ensure smooth working plenty of assistance is needed; not less than three masters can properly deal with a camp of thirty boys, and above that number one master for every additional fifteen boys is essential. The most satisfactory arrangement is for each member of the Staff to undertake some specific duty, usually the duty for which he feels most fitted. Broadly speaking, the work can be divided into three sections, viz.

1. The superintendence of general arrangements, including excursions;

2. Commissariat;

3. Sports and pastimes;

while every teacher will foster the subject in which he is particularly interested.

As already mentioned, work under the foregoing headings commences some time before camp week. In the first section the work which can be done prior to the camping week consists of planning excursions and making railway arrangements, and includes also the gathering and tabulating of interesting information about the district, and the bringing of the same before the notice of the scholars. During the camp week the master in charge of this section will devote himself to the general welfare of the boys. He

is the one to whom the boys will come with their troubles and from whom they will seek advice. It will rest with him to see that the camp is kept clean and sanitary, and that the time-table is adhered to as strictly as possible.

The work of the commissariat department is arduous, and the master in charge may require assistance. Much worry can be avoided by beginning early enough, thereby ensuring that supplies are ordered and arrangements completed for the delivery of the goods needed. The arranging of the daily *menus* in accordance with the available foodstuffs requires careful attention in order to avoid monotony, and to make the meals healthful and palatable, while a strict eye must be kept on economy. When an initial visit is paid to the camping-ground it is advisable to select at the same time the most suitable butcher and grocer and to make preliminary verbal arrangements with them.

The greater part of the sports programme can be drawn up ahead and attention given to the matter of the equipment for the sports. Should it be thought desirable to try conclusions at cricket with a local school or other team negotiations can be entered into and the fixtures completed.

If the above suggestions are carried out so that the ground-work is well prepared, the anxieties and the work of camp week itself will be much lessened and correspondingly greater benefits will accrue to the scholars.

CHAPTER II

THE FORMATION OF THE CAMP

Time — Selection of site — Erection of tents, &c. — Railway facilities —
Cost.

It is probably quite safe to assume that the time chosen for holding camp will fall in the period between the end of April and beginning of September, and in many cases one of the weeks of the summer holiday will be utilized for the purpose. June or early July is perhaps a better time for camping than August. The long period of daylight is a great advantage, and the weather, in the latter part of June at any rate, is usually very warm and settled. Nature is most certainly at her best at this time, a fact worth careful consideration from the educational side. According to the custom of the present day the period will not coincide either with the school summer holiday or with the holidays of the parents, but there is now a tendency to commence the holidays at an earlier date. A change in this direction is very desirable, and the demands made by those anxious to inaugurate camps, and the extension of the movement generally, may succeed in so placing this annual holiday that it will coincide with the hay harvest rather than with the corn harvest, as is at present the case. While the claim for midsummer camping and earlier summer holidays is urged, the authors realize that local conditions will always influence the dates.

The selection of a site depends to some extent upon

the financial means at one's disposal. Ideally the best site is one which offers the best combination of educational and recreative facilities without involving too great an expense. Needless to say, a rural area is preferable to an urban one, and access to the sea is a great attraction to inland dwellers. There is much to be said for choosing a district at some considerable distance from home. The children have thereby an opportunity of seeing an entirely new type of countryside, and hence great scope for making valuable comparisons with their own neighbourhood. They are also entirely removed from local and domestic influences, and being 'on their own', so to speak, are called upon to develop a sense of manly independence.

A district already known to some members of the Staff has advantages, because whatever area is chosen it is very essential that the masters should be well acquainted with all matters likely to come within the view of the scholars. Whether it be a seaside or rural camp one naturally turns to the farmer for suitable ground. Generally speaking, he is sympathetic and helpful, provided always that guarantees are forthcoming that no damage shall be done to his property, particularly to his hedges and walls.

The ideal field is one with a gentle slope and a porous subsoil. Though both conditions may not always be found together, at least one of the two is indispensable. The question is one of drainage, for given either porous soil or a clay soil and a good slope, the water which tends to accumulate during a heavy shower will not prove unmanageable. Ground which may become waterlogged, even temporarily, is both troublesome and injurious; half an hour's heavy rain may, by damping clothes and bedding, do damage sufficient to undermine the health of a whole camp. Stony ground should be avoided, and a good depth

of firm soil is necessary, for otherwise tent pegs will either be broken or will fail to hold well, and both of these will be sources of anxiety, particularly in the event of a strong wind arising; hard ground is also troublesome as it is difficult to excavate for any purposes required in the camp arrangements.

Provided that the movements of the campers do not in any way interfere with the residents of the farm, a field near to the farm buildings is desirable. Many farmers depend upon well water for their supply, and the pump is often situated within the farm precincts, therefore labour and time are saved if the camp is near at hand. Under no circumstances should cows or horses be permitted to graze in the same field as that in which the tents are placed. This may be a difficult matter to adjust with the farmer, but it is worth a good deal of trouble to obtain satisfaction. Both cows and horses are inquisitive beasts, and consequently a perpetual menace to all camp property. Only those who have lived in tents can appreciate the many different ways in which the animals can make themselves a nuisance—unconsciously, no doubt—but the knowledge of that fact does not pay for the trouble and cost of repairs which may result from these visits. Moreover, their presence is a perpetual temptation to boys to ‘look after them’, a pursuit which generally ends by causing friction with the farmer.

Though camping will generally take place during the period of most settled weather, the possibilities of a wet day or a heavy summer shower cannot be overlooked. In anticipation of such an occurrence it is well to try to arrange for some outbuilding to be kept in reserve as a temporary resort for feeding and shelter in case of emergency.

Nothing is more prejudicial to the welfare of camp life than the curious and unofficial attentions of the public, and the field chosen should be one removed from all public roads and pathways. Main roads in the country are nowadays rendered dangerous by the motor traffic upon them, and accidents may easily occur if the field gives direct access to such a road ; in fact danger lurks in many unsuspected quarters, and the proximity of ponds, disused quarries, railway lines and level crossings should be specially noted when considering the *pros* and *cons* of any prospective site.

No matter how favourable the situation may be topographically, there are still two important factors to be taken into account, viz. Transport and Food Supply. Many otherwise admirable camping grounds have to be abandoned owing to the local inadequacy of these two services. A baker, grocer, and butcher, capable of undertaking the provision of their respective commodities, must be available within reasonable distance. One must remember that it is not always possible to depend upon a remote country village for a supply of food, seeing that the presence of an additional sixty or seventy persons may swell the population abnormally. Meat and bread must be delivered fresh daily, primarily for hygienic reasons, but also because lack of proper accommodation makes it undesirable, if not impossible, to keep a store of such foodstuffs about a camp. The farmer may perhaps undertake to supply milk, butter, eggs, potatoes and green vegetables, but is not likely to be able to sell any other commodities. X

Unless cost is no consideration it is wise to keep fairly near to a railway station. The transfer of luggage from station to field and vice versa becomes a serious item of expenditure if any great distance is involved, and in country districts it is often extremely difficult to obtain conveyances

rapidly shrink and may even shrink so much that either the pegs or canvas must give way. If the pole is dislodged from the brick the tension is reduced and the danger averted, and, what is perhaps equally important, the uncomfortable ordeal of turning out in the wet and slacking ropes is avoided. The character of the ground will determine the advisability of trenching round the tents ; usually it is unnecessary, but if such a course is decided upon, the turves must be cut and stacked away carefully, so that they can be easily and properly replaced when camp breaks up. This matter is worthy of attention because, naturally, the farmer does not like either to have his ground defaced or to be given the trouble of replacing the turf for himself, and such neglect on the part of the responsible party spoils the chances of future campers.

If possible the stove should be erected in some sheltered place, preferably under a large tree which will provide some protection both from stormy and hot weather. Camp stoves are not usually fitted with stands, but are made to rest on the ground. If by some means the stove can be raised from the ground it is an advantage to the cook, as it saves a good deal of lifting. Stones or bricks are often available with which to build up such a foundation, and full particulars as to the method of assembling the parts is usually received with a stove. The question of the choice of any particular type of stove, and the construction and equipment of a kitchen are discussed in greater detail in a later chapter.

Immediately on arrival in camp a party must be told off to attend to the digging of the latrine and the erection of the screen around it. For this purpose the position of the four corner posts must be fixed by careful measurement and holes prepared for their reception. 'Dummy driving'

usually achieves this object most readily, that is, a short stake of similar cross-section to that of the proper posts is driven into the ground with a mawl, then loosened and extracted, and the proper post inserted. A trench is then dug sufficiently large to meet all requirements, care being taken not to allow it to approach the posts too closely or otherwise their stability may be impaired. All the uprights having been fixed in position the cross-bars are bolted in their places and the canvas tacked round. The width of the canvas is about forty inches, so that two widths will be required; the upper will be fastened all round, and the lower will be carried as far as the doorway only. Large-headed tacks or upholsterer's nails should be used to fasten the canvas, otherwise it may be torn away and damaged by a strong wind.

Games and sports are an integral part of camp life, and suitable ground for them is essential. This should be borne in mind when selecting the camp site. It is sometimes possible to get a large field with a suitable surface, where all kinds of games can be indulged in. If this cannot be done, the farmer may lend a suitable field for use during one or two afternoons of the week, or a local sports club, whose assistance is as a rule willingly offered, may be approached.

The cost of a camp-week for each boy is comparatively small. Modern conditions have enhanced prices, but these are only comparative, and when travelling facilities are restored there will be found no serious impediment. A fluctuating item in the cost is the railway fare, which depends upon the numbers and the distance. The railway companies, acting in conjunction with the Board of Education, grant exceptional rates for camp parties. An application form (Voucher R.F. 2), obtainable from the Board of Education, should be filled in (giving details of the proposed camp-

place, numbers, date, &c.) and signed by the officer in charge of the camp and by the officer of the local education authority. On receipt of this form the Secretary of the Board of Education will authorize the railway company concerned to issue the necessary tickets. It is suggested that the date upon which the party decides to travel should be fixed after consultation with a railway official.

The scale of fares is as follows :

Officers (1 for every 10 juveniles): Single ordinary fare for return journey.

Juveniles (14 years to 18 years): Single ordinary fare for return journey.

Juveniles (under 14 years old): Half single ordinary fare for return journey.

A covered passenger van for the conveyance of all camp equipment and luggage can be hired at a rate of sixpence per car mile; by this means all the impedimenta can be transported with the minimum of trouble and cost. This method is particularly advantageous in the case of the boys' personal luggage, which in the aggregate is considerable and troublesome, not only to the owners but to everybody else if taken on the train with the party. The dispatching of the van in advance is also an advantage if an advance party is sent to make preliminary arrangements.

Generally speaking, the expenditure on food can be estimated at about 50 per cent. of the total cost. The following list will show the total and incidental cost of a camp for sixty persons, fifty-four boys and six adults. The camp, it will be supposed, is situated about one hundred miles from home and is held for a period of eight days. Nine boys sleep in a tent, and one tent is used by the Staff. The charge for each person is seventeen shillings, so that the

income is fifty-one pounds and the expenditure is somewhat as follows :

	£	s.	d.
7 Tents, at 5s. 6d. each	1	18	6
60 Ground-sheets, at 6d. each	1	10	0
60 Blankets, at 6d. each	1	10	0
60 Railway fares :			
44 Boys, at 4s. each	8	16	0
10 Boys, at 8s. each	4	0	0
6 Adults, at 8s. each	2	8	0
Food, at 8s. per head	24	0	0
Hire of field—on basis of 3s. per tent	1	1	0
Luggage van	2	10	0
Balance	3	6	6
	<hr/>		
	£51	0	0
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CHAPTER III

EQUIPMENT OF A CAMP

Housing — Feeding — Clothing.

THE camp locality and site having been fixed, housing and feeding next demand attention. Housing resolves itself largely into the matter of sleeping accommodation. Everything depends exactly upon the type of camp which is proposed. The camp may be perfectly self-contained—tents for sleeping, marquee for dining, and portable camp stove for cooking—or some modifications may be introduced either as necessary expedients or to meet one's personal views. Sleeping accommodation may be obtained in a good barn or schoolroom, and only cooking, &c., done in the field, or tents may be used for sleeping, and arrangements made with a local resident, e.g. the farmer's wife, to do the cooking. The authors have tried the latter course on two occasions and have found it to work admirably for a party not exceeding twenty-five in number.

A self-contained camp is, on the whole, best. If the party possesses complete cooking and sleeping equipment more latitude is permissible in the selection of a site, and not only is there a greater feeling of independence, but also a more lively sense of real camp life, and the boys are more directly interested in all the details of their new mode of living.

The average bell-tent is about forty feet in circumference

at the base, and will comfortably house from eight to ten boys. The tents may be either bought or hired; but as the period during which they are in use is short and the hiring-price low, hiring is preferable to purchase unless a very advantageous purchase can be made and unless facilities exist for proper storage and repairs. They can be hired from numerous firms throughout the country and, complete with pegs, cost about 5s. 6d. per week *plus* the cost of carriage. A fifty per cent. reduction is usually made for subsequent weeks.

The flooring of a tent is a separate item. Wooden floors may be used but are not recommended; they are heavy and hence the cost of transport is a consideration, and they are difficult to lay satisfactorily; also wooden floors are hard to sleep upon unless palliasses, or some other type of bedding is provided. Some firms supply tarpaulin sheets to cover the floor space, and these are better than boards, but not altogether satisfactory. The tent pole has to be placed upon the centre of the sheet, which prevents the sheet from being moved readily, and thus increases the difficulty of cleaning when it is soiled. A still worse drawback is the difficulty of drying, should the sheet get wet, and this is a very likely thing to happen if it projects at any point beyond the curtain of the tent, in which case it is apt to act as a shallow trap to catch rain, and the water then flows towards the lowest part of the sheet. Ground-sheets, army pattern, have proved most satisfactory. They adapt themselves to the turf, are warm and waterproof, and can be thrown out during some part of the day to be dried thoroughly and aired, whilst at the same time the ground inside the tent is given a chance to freshen. Ground-sheets can be hired with the tents at a cost of sixpence each per week, and each boy can be supplied

with one. The usual method of sleeping is with the feet towards the centre of the tent, so that where there are eight or nine sheets in a tent there is a considerable amount of overlapping, which is an additional advantage. A word as to the correct way to lay them may not be out of place; it may appear superfluous, but the authors have been surprised to find that many boys lay them with the rubber side upwards instead of towards the ground, and it is as well to mention this point to the boys beforehand.

It is the usual practice to supply every boy with one blanket; this can be hired with the rest of the equipment. Brown army blankets are always supplied at a cost of sixpence each. Each boy is instructed to take one other blanket or large rug himself, and with a reasonable number of boys per tent this number has ensured ample warmth for every one.

If the numbers in camp are fairly large, say fifty or more, it is advisable to take an extra tent, to be erected for use as a stores tent. It will be found useful for storing away many of the odds and ends required in camp at various times, such as buckets, spades, lamps, apparatus for games, as well as packing cases and spare equipment. If certain non-perishable foods be taken to camp instead of being purchased locally a dry storage tent will be almost necessary.

Cooking occupies a prominent place in the scheme. The art and practice of cooking is valuable educationally, and indeed a knowledge of the subject is essential for those who intend to go to the Colonies. What share the boys should take in the preparation of the food is debatable. In a girls' camp cooking has an important place in the curriculum, but as there is so much other material of greater educational value for boys, cooking by them is not

recommended. Apart from its position in the scale of educational values, there are other considerations. A carefully regulated time-table is very important. Meals must be taken at definite times, and their preparation must be in the hands of a trustworthy person, otherwise the daily programme and, what is still more important, the health of the community will suffer. One cannot emphasize the fact too much that uncertainty as to the time and the quality of a meal is very detrimental to the interests of the work. It is therefore better to relegate the preparation of meals to some one who can devote the whole of his or her attention to the work. Small duties appertaining to it would certainly be done by the boys; these duties will include the peeling of potatoes, washing the cook's utensils and fetching water. Assuming, then, that the work will be done independently, the two methods already mentioned are available. Domestic culinary facilities are limited, and should the numbers exceed twenty-five it is doubtful if one kitchen range will be large enough to do the work. The two types of ovens used in the field are 'ground ovens' and portable 'camp ovens'. Ground ovens are not altogether satisfactory, especially when they are to be used for such a short time. They involve interference with the surface of the ground, and generally necessitate an advance party to prepare them. A farmer will usually stipulate that the surface of his ground be interfered with as little as possible. He does not mind the grass being worn, for that is even beneficial, but he objects to the cutting and removal of turf. Portable camp stoves give more satisfaction; one may be either bought or hired, and purchase is recommended, as storage is not difficult, nor is there much likelihood of repairs being required nor of any serious deterioration. A good stove, capable of cooking

for eighty persons, can be obtained new for £9, and this includes a small boiler with a capacity of about three gallons. Hot water is an exceptionally valuable commodity in camp, and no camping equipment is complete which does not provide for a good supply of this. Apart from the requirements for drinking purposes, there is the washing of cooking utensils and 'crocker'. An additional supply of hot water can be obtained by using an army or navy kettle heated on a brazier. A better way is to use a caterer's small hot-water boiler, with a capacity of about fifteen gallons. These are not costly, their fuel consumption is small, and one will well repay the outlay upon it. A new one can be purchased for about £3.

Some masters prefer a marquee for the purposes of assembly and for meals, but it is doubtful if the resulting advantages compensate for the additional cost. Marquees are expensive to hire, and are not easy to erect. Meals in the open air are satisfactory in every respect, and if precautions are taken to provide for temporary disability caused by rain, there is no reason why this additional expense should be incurred.

It is extremely important that feeding should be done decorously and properly. Squatting on the ground with a plate between one's legs may be all right on a day's picnic, but it is not the sort of procedure that should obtain in a well-ordered community. Boys are apt to become slovenly in their feeding habits, and the type of feeding with the methods just described will do more harm than good. If at all possible some sort of tables should be provided at which the children can partake of their meal properly. Not only is such a course desirable hygienically, but it is a valuable bit of social education, useful in the training of manners and habits of the children.

The type of table recommended, and which can be made by the boys themselves, is discussed in Chapter V.

There are numerous small items which should not be allowed to escape attention ; many, if not really necessary, are conducive to the smooth working of a camp. One or two spades are useful about a camp. They are handy in the event of heavy rain, when it may be necessary to dig trenches round the tents, and one will be required for digging the latrine and for the daily covering of the refuse. Though no arrangement need be made for the illumination of the tents, as there will be sufficient light to meet the requirements of the boys, a few hurricane lamps may be included in the general equipment. One may remark here, that, apart from electric hand-lamps, no lamps other than well constructed hurricane lamps are trustworthy when a strong wind is blowing. The master in charge must visit every tent before retiring himself, and he may be called up in the night to see a boy who is indisposed ; or, should a storm arise, it may be necessary to make a tour of the camp, and in all cases a trustworthy lamp is most valuable. An adequate supply of buckets is also desirable. Perhaps the most satisfactory method of obtaining them is to make the company of each tent responsible for securing at least two. These should be well marked in order to guarantee their return to the owners both during camp-time and afterwards. It is the duty of the members of each tent to prepare their share of the potatoes required each day ; these can be distributed in buckets, peeled, washed and returned to the cook in the same utensil. If small baths, such as are used in laundry centres, can be obtained, each tent might be supplied with one, and these are more satisfactory than buckets for potato washing. No doubt other small items will suggest themselves as preparations

proceed. A box of tools is useful. This can be fitted up from the Manual Room stock, and might contain, for example, a small saw, large and small hammer, screwdriver, large chisel, pair of pincers, brace and bit, and an assortment of nails and screws.

A few words on clothing may be useful. Clothing should be as light and simple as possible compatible with neatness and suitability. If the School has its own colours, naturally each boy will be expected to wear the school cap and badge. Jerseys usually form part of the school dress, and the jersey is an ideal camping garment. It is easily donned, is warm, light, comfortable, and cannot be readily spoiled by tent usage. Collars and ties, with their accessories such as studs and tie-clips, can be avoided, and these articles are easily misplaced in a tent. A change of clothing must be provided as a safeguard against colds, &c., should a boy get wet as a result of either bad weather or accident. Straw hats are not very satisfactory; they are troublesome in a tent, on windy days, and on long excursions. A pair of strong, watertight boots is very necessary. They are much more comfortable for long-distance walking than light ones, and they are a preventive of sore feet. They must be watertight to resist the heavy dews of morning and evening, if for no other reason. A pair of gymnasium or similar shoes should also be included. They provide a restful change for the feet after a long walk, and may be useful for games; they are also better to wear in and about a tent than heavy, and often dirty, boots. An alternative to the above is that of going barefoot about the camp, and wearing boots only when going long road walks. The practice of going barefoot is beneficial if it is habitual and not casual, otherwise there is a chance that chills, &c., may be contracted. In our opinion the length of time spent in camp

is insufficient to make any particular practice really habitual, and therefore to the town boy who is unaccustomed to bare feet, there is a distinct danger. Moreover, the wearing of heavy boots alternately with that of going barefoot may produce irritation and soreness.

Perhaps readers will criticize much of the above on the ground that it is too lavish for a boys' camp. The authors would be the last people in the world to make a camp a luxurious holiday centre ; but experience has taught that, for example, boys must be fed properly and regularly, and that it is courting disaster to depend upon amateur attempts at cooking. Meal-times must come and go with the regularity of home, otherwise the day's programme will be disarranged, and the *real* work of the camp endangered. There must necessarily be a limit to the general and personal kit, and the items enumerated are such as will not unduly burden the transport, yet will render service sufficient to warrant their inclusion.

CHAPTER IV

FOOD

Meal-times — Quantities and Cost of Commodities — Menus — Cooking Utensils — Prepared Foods.

THE food question of the camp is very important because on this point so much depends. No amount of fresh country air or sea-breezes will brace a boy up if his daily food is in any way faulty or poor. The authorities must be prepared to provide a well-balanced menu, ample in quantity, of good quality, served at the best time and in the most satisfactory manner that circumstances will permit. Camp is not a place of luxury, and food will necessarily be plain, but so long as there is plenty of variety, the palate will not demur; living continually in fresh air stimulates the appetite to an extent almost alarming.

Number and Times of Meals. The times chosen for meals are—

8 a.m. Breakfast;

1 p.m. Dinner;

5 p.m. Tea;

8.30–9 p.m. Supper.

Breakfast. This meal will consist of the following: oatmeal porridge with milk, sugar or treacle, cocoa or coffee, bread and butter, together with changes rung on the following—eggs, fish, potted beef, bacon, ham, beef and ham rolls. Such a breakfast is not as expensive as at first appears, for after a good portion of porridge a boy only

requires a small helping of the second course. It is not advisable, on the other hand, to breakfast wholly on porridge, for the good walk during the morning, with perhaps a stiff climb, will warrant a substantial breakfast beforehand. Some will advise taking lunch—bread and cheese; the authors reject this advice, for experience has proved that the carrying of lunch is always irksome to a boy, that very few boys eat cheese, and that lunch takes away the keenness of the appetite for dinner. One would rather advise handing round to each boy an apple to be eaten during the morning, but whether this would constitute lunch or not depends on the boy.

Dinner. This is the meal of the day and one that is keenly enjoyed by the boys, especially after a good country walk and a subsequent 'clean up'. Plenty of variety must here be the key-note, with a minimum of stews, especially in hot weather. Beef, mutton (roasted or boiled), peas, haricots; meat-pie, Irish stew, serve as a list from which the first course may be chosen. For the second course such items as currant, rice, fig, and ginger pudding, apple-cake, currant and raisin pastry will find favour.

Tea. This will be a much lighter meal, no meats being provided. It will consist of tea, bread (white and brown) and butter, plain buttered currant cake or scones, jam or stewed fruit.

Supper. With regard to this meal the authors have found it expedient to give a drink of warm milk, or cocoa and milk, a bun or a piece of cake or biscuits before retiring. This is not intended as a formal meal seated at tables, but it has been found to satisfy the needs of the body during the night and to be conducive to a good night's rest.

Commodities. Tea. It is advisable to obtain a good brand of this article; it goes further and is more economical

than the so-called cheaper tea. It should be infused in muslin bags made with draw tapes, and sufficiently large to allow of the expansion of the leaves when they are scalded. It is convenient to have the tea weighed up into two-ounce packets beforehand ; this facilitates easy and correct judging of the amount required at a meal. After the first meal, when one has gauged the drinking capacity of the population, careful note should be made and registered of the amount of tea which has been used to give complete satisfaction, both in quantity and in strength, and also how much is left in the urns, for if the tea is sweetened, sugar and milk (important items in the economical working of the camp) are also wasted.

Coffee. The remarks made concerning the tea also apply to the coffee. If an additional set of muslin bags be procured, one can be sure of having a 'dry set' for the next meal. The coffee should be of a good brand, pure and free from chicory, for the latter is disliked by many people. Coffee will be found twice as costly as tea.

Cocoa. This food is best prepared by mixing it first into a paste, then gradually adding boiling water ; this avoids the lumpy sediment so common when large quantities are prepared. The sugar should be made into a syrup with hot water and poured into the cocoa, to avoid any wastage. It is well to arrange for the cocoa to be weighed out in two-ounce tins. Milk to be added should be boiled, for the cocoa must be served hot as it cools very soon in the open air. Here, again, a good brand of cocoa will prove the cheapest.

Oatmeal. This food is mainly required for the porridge, and the coarse-ground variety of oatmeal is preferable. To prepare the porridge the oatmeal should be placed in the pans or kettles, covered with water, and soaked over-night ;

this lessens the length of time required for cooking on the next day. The kettles should be put on the braziers early, one hour before the porridge is required, and kept constantly stirred while on a slow heat. With the slightest burn the delicate flavour of porridge is lost. This is an important dish, and it is necessary that boys should acquire a liking for it. Experience shows, however, that very few town boys are accustomed to eating porridge for breakfast, but most boys rapidly develop a taste for it at camp. A liberal addition of salt takes away the insipid character of boiled oatmeal and accentuates the taste of sugar if the latter be used.

Bread. The supply of bread will be obtained locally, and the master responsible for the food should take care that the store of bread is always a day in advance of the requirements, for new bread is uneconomical, not so easily digested, and difficult to cut. The form of loaves known as sandwich loaves are very convenient, and the labour of cutting is considerably lessened if one possesses a bread-cutter.

Sugar. The ordinary white moist sugar will prove most suitable for all purposes. It is not advisable to take more than one kind, for this means extra thought and attention as regards packing and storing. The authors again advocate the practice of the sugar being weighed up into half-pound packets. Without appearing parsimonious, it is not advisable to allow boys to help themselves to sugar and milk, for often they are very extravagant in the use of these commodities.

Butter. This is usually supplied by the farmer, but he should know at least a fortnight beforehand the probable amount required so that he can keep back that quantity from his dairyman.

Jam. This food makes a good stand-by and is much relished by most boys; the more varied the assortment of jam, the better, and although a little extra trouble is involved, it is an advantage to have two sorts in use in order to cater for all. The following kinds have been proved to be favourites: blackberry and apple, raspberry, strawberry, and apricot. For this reason it is recommended that these form the bulk of the supply. Two-pound jars are most convenient, for the larger the jars the more dust and dirt they are likely to accumulate before the jam is finished. It should be made a practice to so gauge the amount required, that none is left over for another meal. The contents of half-empty jars lose their freshness and are unhygienic.

Meat. This is another matter which must be arranged some weeks in advance. A camp is often held well out in the country, quite away from any butchers' shops, and even these may not be able to provide the large joints that are required. If the camp is situated near a sea-side village or even if within thirty miles or so of a shop, it is a simple matter for a daily supply of fresh meat to be forwarded by train. Butchers in such places, it will be found, are very accommodating, and by arrangement will supply the necessary quantity if they are given a clear day's notice. It is expedient that the master who is responsible for the food arrangements should take the first day's supply of meat with him, and mutton chops will form a convenient dish for this particular day. The campers reach their destination about noon, and by this time the advance party will have erected the field kitchen, the ovens will be hot, and the potatoes will be cooking; thus, while the boys are having a wash after their journey, the meat can be readily and conveniently prepared.

Milk. This all-important food is easily provided, for, as a rule, the farmer who is accustomed to churn his milk into butter will be pleased to sell to the camp as much milk as is required. This pays him better than butter-making, and so long as he knows at night the next day's requirements there will be no difficulty.

Eggs. This matter ought also to be reckoned with beforehand as the farmer may, or may not, be able to supply eggs in sufficient quantities. Again, it is advisable to obtain the opinion of the campers as regards their liking for eggs. Experience shows that they are not much relished at camp. It may be possible, if the camp is held in August or September, and in a good mushroom-growing district, to obtain a supply of mushrooms for breakfast ; this would prove a welcome change in the menu and by arrangement would give certain boys an opportunity of working off the early-rising habits which they contrive to develop in camp.

Fish. Concerning this food another appeal to boys may give greater satisfaction and prevent waste, for quite a large number of boys do not care for fish, and it may be simpler and more advisable to choose another course. The choice of fish, if any, will of necessity be of the cheaper varieties, such as cod, bloaters, kippers, haddock. An alternative course to fish may be potted beef, which would probably be enjoyed by a larger number of boys.

Bacon. This food forms a somewhat expensive dish ; eaten in the open air it does not always give satisfaction, for it is difficult to serve hot, moreover, supplying bacon to sixty boys is almost impracticable. As a substitute a cooked ham is recommended if the funds will permit.

Ham and Beef Roll. This is a less expensive dish than either bacon or ham, and forms a very tasty addition to breakfast. It is convenient in form, readily and easily

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served, and, like potted beef, can be prepared beforehand.

Potted Beef. A good supply of this meat is not to be despised. It is handy, stores in small space, and can be prepared the day before camp begins.

Food—Quantities. The scheme of quantities must necessarily be very elastic, for its accuracy depends altogether on the various courses chosen; for instance, if porridge is dispensed with for breakfast once or twice, less oatmeal will be required than the amount stated. The authors trust, however, that the figures given in the table appended will serve as a basis on which to work. They are the result of careful calculation based on the figures obtained during several years. The basis taken is sixty, and this will include four or five masters and two cooks, the boys themselves ranging from twelve to sixteen years of age. With growing boys plenty of bread is required, for this is the staple food and there should be no shortage in this direction. It is advisable to order generous supplies of food without being extravagant, as it is very annoying to run short in some particular commodity the day before it is required, for the local grocer may also be without the same article, and thus a hitch occurs which may be disastrous, for faults in this section never appear singly. Any food left over at the break-up of camp can easily be sold at a little less than cost price.

The following table gives the quantities required for a camp of sixty persons, and the prices are those which obtained in pre-war days :

			s.	d.
Tea	3½ lb.	@	2	6 per lb.
Coffee	2¼ "	@	1	8 "
Cocoa	3 "	@	2	0 "
Sugar	45 "	@	2	½ "
Oatmeal	32 "	@	2	"
Butter	24 "	@	1	2 "

Jam	40	lb.	@	5d., 6d., 7d.	per lb.
Meat	130	„	@	7d., 8d., 9d., 9½d.	per lb.
				s. d.	
Peas	12	„	@	4	per lb.
Haricots	7	„	@	5	„ One meal.
Lentils	1	„	@	3	„
Rhubarb	15	„	@	½	„
Figs	6	„	@	4	„
Prunes	6	„	@	6	„
Apricots	6	„	@	9	„
Fish	25	„	@	7	„
Bacon	10	„	@	10	„
Ham	10	„	@	1 0	„
Potted beef	8	„	@	1 0	„
Beef and					
ham roll	10	„	@	9½	„
Milk	50	galls.	@	1 2	per gallon.
Eggs	100		@	10 or 12	for 1s.
Bread	140	loaves		112	white
				28	brown
Apples			@	3d.	per lb.

The following table suggests one week's menu. It will be noticed that where meats are served for breakfast a full ration of meat is not included in the dinner. An alternative is offered here and there to meet the various circumstances of camp.

	<i>Breakfast.</i>	<i>Dinner.</i>	<i>Tea.</i>
Saturday	A light lunch in the train.	Mutton chops with mince sauce Potatoes Apple pasty.	Tea Bread and butter (white and brown) Jam.
Sunday	Porridge and milk Coffee or cocoa Bread and butter Ham and beef roll.	Roast beef Potatoes Haricots Plum pudding.	Tea Bread and butter (white and brown) Stewed figs.
Monday	Porridge and milk Coffee or cocoa Bread and butter or dripping Jam.	Legs of mutton Mint sauce Potatoes Peas Currant pasty.	Tea Bread and butter (white and brown) Stewed fruit.

	<i>Breakfast.</i>	<i>Dinner.</i>	<i>Tea.</i>
Tuesday	Porridge and milk Coffee or cocoa Bread and butter or dripping. Potted beef.	Meat pie Potatoes Rice pudding Stewed fruit.	Tea Bread and butter (white and brown) Jam.
Wednesday	Porridge and milk Coffee or cocoa Bread and butter or dripping Eggs.	Roast beef Potatoes Haricots Plum pudding.	Tea Bread and butter (white and brown) Stewed fruit
Thursday	Porridge and milk Coffee or cocoa Cooked ham Bread and butter.	Irish stew Potatoes Yorkshire pudding with jam.	Tea Bread and butter (white and brown) Stewed apples.
Friday	Porridge and milk Coffee or cocoa Bread and butter Fish.	Legs of mutton Mint sauce Potatoes Fruit tart with rice pudding.	Tea Bread and butter (white and brown) Jam Buttered Scone.
Saturday	Porridge and milk Coffee or cocoa Jam Bread and butter.	Beef sandwiches Cocoa.	

Kitchen and Cooking Utensils. It is often a difficult question to decide what cooking utensils should be taken to camp. To carry too many is a burden and a waste of time and labour, and to run short of them is equally a nuisance. Still, in camp, whether self-contained or otherwise, certain articles are essential. If numbers are small and the cooking is done at a farm-house, it is very unlikely that the mistress of the house will have the necessary equipment, either from the point of view of quantity or of size. It adds to the pleasure and the smooth and orderly working of a camp to have a sufficiency of 'pots and pans'. The following list will serve as a guide, sixty or thereabouts being taken as the number of persons to be provided for.

The Cooking Stove. This must be the first consideration, and it is wise to attempt no economy when selecting a field stove. Military 'ground-ovens', 'clay-ovens' are all right in their way, but they are somewhat fallible, and their success as ovens is indifferent. A proper coal oven is advocated. Messrs. Langdons, of Liverpool, show in their catalogue a very simple one which does its work well, is comparatively light, and can be packed with great ease. The chimneys, kettles, dishes, draught-plates all fit into the two ovens, which then rest side by side in a well-made crate. The inside measurements of the ovens in the above stove are 16 in. by 13½ in. by 13½ in., and by manipulating the draughts one can regulate the heat for the ovens quite satisfactorily.

Pudding Dishes. Four or six of these are required, especially if the runners and plates in the ovens will admit of so many. The size should be roughly 14 in. by 11 in. The dishes supplied with the stove described above are very strong, with wire roll tops and handles at the ends.

Meat Tins. The pudding dishes will, if not used as such, make serviceable meat tins, but often both are required in the preparation of the same meal, and therefore it is advisable to procure meat tins; three will be required, for occasionally three smaller joints are cooked instead of two. The size of the tins will be governed by the size of the ovens.

Pie Dishes. Six dishes are necessary, and enamelled goods are the best. They should be about 12 in. diameter and 4 in. deep, with a good broad lip; these form very handy utensils. They serve as mixing bowls, and also for soaking oatmeal overnight. Their shape must be such that they 'nestle' one into the other.

Kettles. Three kettles are supplied with the aforementioned stove, each holding about six gallons. One is fitted with a strong brass plug tap, and so this kettle could be reserved as an urn as it suffices for fifty boys at tea. In addition to the above it is suggested that the camp should purchase two or three kettles of the army pattern for porridge boiling or stews. An extra kettle for emergencies is always an advantage.

Enamelled Jugs. Various sizes of jugs are always being required for milk or water; three will be adequate, and these should hold respectively two gallons, one and a half gallons, and half a gallon.

Enamelled Lading-Cans. Two will be required.

Zinc Buckets. It is advisable to take at least two.

Wooden Jam Spoons. Four spoons will be sufficient; these are used for ladling out porridge, pudding, &c.

Braziers. It will be found convenient to have two braziers for the boiling of porridge and vegetables, thus leaving the water boiler free to provide a hot-water supply for cooking and washing up.

Carving Sets. Three cases of carvers will be sufficient.

Net Bags. These are used for the quick handling of potatoes. Six are required, each holding conveniently six or seven pounds. They may be purchased from a rope and twine dealer.

Bread-cutter. If a small number of boys is taken to camp a bread-cutter can be dispensed with, but with large numbers it saves much time and labour, as the bread-cutting for sixty or more is a huge task. There are various kinds on the market, but in all probability one can be hired from a neighbouring club or Sunday-school. It is a good plan for a school which holds an annual camp to conclude an agreement with a neighbouring club whereby

an exchange of such articles as the aforementioned can be effected and thus diminish considerably the expenses.

Field Boiler. This is a necessary item of camp apparatus. Hot water is constantly being required, both for cooking and washing things, and the ordinary stove kettles prove quite inadequate to provide it in large quantities. There are good designs on the market at fairly reasonable prices. The capacity should be from fifteen to twenty gallons, and for convenience of handling and transport the boiler should be in sections, namely, the chimney, the body, and the fire-grate or base.

To purchase all the foregoing articles means a large outlay of money, and as a rule such a list is obtained gradually, as with other camp materials. If the school has a cookery or housewifery department the problem is partially solved, for a great number of the utensils mentioned can probably be borrowed from those departments. Small zinc baths obtained in this way might take the place of buckets; an extra large saucepan or two, jam spoons, washing bowls, might also be borrowed. Again, if dinners are prepared at school, or if there are any dining arrangements, an additional number can be added, such as jugs, urns, cutlery. Several articles may be borrowed from the homes of intending campers, but the drawback here is that the objects borrowed are often unsuitable and of all shapes and sizes. The authors do not recommend this course. If apparatus has to be purchased the cheaper way is to obtain it directly from a wholesale firm, for thus one will at least avoid paying the ordinary retailer's profit.

What food to take and how to take it. What food is it advisable to take to camp? This is a question which will be asked by many, and which is not the easiest to answer, for so many factors enter into it. In the first place,

food, tea, coffee, &c. can generally be bought more cheaply at home. One can see it before purchasing, and when it is purchased one can have it packed into the most convenient forms. Together with the rest of the luggage it is delivered into camp, and there it is—ready to hand, sufficient for the week or fortnight, as the case may be. Thus the masters are not dependent on the caprices of the village tradesmen, and much time is saved that would otherwise be taken up in journeys between the stores and the camp. On the other hand there will be extra packing, more boxes and additional room to provide. As previously stated, the 'Food Controller', when visiting the camping ground, will have interviewed suitable tradesmen and obtained from them price-lists of the goods required. He will also have compared these prices with those prevailing at home, and thus be in a position to use his discretion to the best advantage. Both these methods of solving the food question have been tried, and the authors recommend that as much food as possible be taken, with the exception of meat, confectionery, and what the farmer can supply. If a large supply of food is taken, an extra tent—either a bell tent or a *D'Abri*—must be hired and used as a stores tent. It is a good plan for the master responsible for the school stock to save all wooden boxes, string and rope that periodically arrive at school with apparatus and stationery, for such are admirably suited for the packing of food. Wherever it is possible each box should contain goods of a similar nature. The master in charge should be present when the packing is in progress. It will be an advantage for each box to be marked on the lid and on each end with a big capital letter, and this should be entered in the stores handbook with the description of the contents of the box written opposite; this arrangement will save time in the preparation of meals.

The following table may be suggestive of packages required :

- Box A. Tea, coffee, cocoa.
- „ B. Sugar.
- „ C. Jam—a strong box needed.
- „ D. Oatmeal.
- „ E. Rice, peas, lentils, beans.
- „ F. Salt, pepper, mustard, mint.
- „ G. Dried fruits.
- „ H. Prepared meats.
- „ I. Plum puddings.

Under no circumstances should food be packed in the same box with cleaning materials. As the food is used out of the boxes the latter can be broken up for firewood. Every box and package of any description should have printed labels tacked on to the lid, denoting the nature of the contents of the box ; this prevents confusion in the stores tent. These labels should be printed in big and conspicuous letters, and this might easily be done by boys in the art lesson, with indian ink and brush, as examples in bold lettering. Needless to say, the stores tent itself should be a model of order and cleanliness, one portion being devoted to boxes of food, another to utensils, &c. Empty jam jars should be stacked neatly by the side of the stores tent or placed in boxes and stored in the open as they are successively emptied of food.

Cooked Food to be taken to Camp. It may be considered absurd to take any cooked foods to camp, but experience has shown that the policy is sound, and that there are advantages in taking some. Wherein do these advantages lie, and what kinds of foods can be taken ? In the first place, the day of arrival in camp is a busy one for everybody, and cooking should be reduced to a minimum ; it will be found that a second course for dinner ready cooked is often very

acceptable. The type of foodstuffs to be taken will be decided by considering

1. Perishability ;
2. Effect of transit ;
3. Comparative cost.

The following are the cooked foods that can be successfully taken :

1. Plain plum puddings.
2. Apple and other fruit pasties.
3. Cooked hams.
4. Potted beef.
5. Beef and ham rolls.

For a camp of sixty, eighteen or twenty puddings about five or six inches in diameter will be sufficient for two dinners. It must be remembered that this is a favourite dish, and that the portions served out must be generous. The puddings are prepared and boiled beforehand in the school copper. At camp they merely require boiling up again before being served. The apple, raisin, and currant pasties may also be made at school in the large ovens usually to be found either in the cookery or dining room ; it is recommended that these pasties be made the day before the departure for camp ; if placed in the oven a few minutes before dinner they will appear fresh and crisp. An old tin trunk serves admirably for the package and storage of pasties—the food keeps moist and the trunk is vermin proof. The boiling of hams and the preparation of potted beef, and beef and ham roll, are comparatively simple matters if one possesses or can hire a mincing machine. It is advisable for these prepared meats to be served early in the week.

CHAPTER V

THE MAKING OF CAMP EQUIPMENT

Tables and seats — Sanitary equipment — Tent fittings.

It often happens that a boy in the Manual or Handicraft Room makes a model or an object which serves no specific purpose either in his daily life or surroundings, and when completed is placed in a cupboard or on a shelf and left there as discarded or lost so that its durability and utility are never tested. Compare this with the scope which exists for the making of camp furniture! Originality, correct conception of ideas, sound construction are all principles which must not be lost, sight of, for camp soon finds the weakness and the unfitness of things. In designing camp materials several further considerations have also to be taken into account. There must be maximum of strength with minimum of weight and space, convenience in the folding up of parts; easy and quick dismemberment, and the possibility of erection with as few tools as possible; absence of small pieces liable to be lost in transit. Good trustworthy timber must be used, as a few rainy days may play havoc with the work of months and mar the success of the camp week. No matter how small the camp is, it should begin with a certain amount of stock, and as the camp grows so will the furniture and other necessary articles. Thus it will be seen that in considering the initial requirements coupled with the repairs every year there is always some handicraft needed. The

list of articles enumerated in this chapter has been simplified and modified so that the making of them will lie within the abilities of boys who attend a manual class. Those objects embodying metal-work can be produced by the exercises of filing, drilling, countersinking, riveting, and simple forging. It is presumed that every Manual Room has the apparatus sufficient to accomplish these tasks, and with regard to the woodwork this should satisfy the scheme of any 'Manual Master'. The list is by no means exhaustive, and it is not intended that it should be slavishly followed; the authors merely present it as suggestive of what can be done, and has actually been done, by boys.

The drawings and illustrations are not drawn to scale, and in many cases self-explanatory detail is omitted. If the illustrations explain the text, and serve as suggestions for improved apparatus, they will have justified their inclusion.

Tables and Seats. Probably the first articles to be made are tables and seats, for experience shows that tables are a necessity rather than a luxury; adverse weather conditions have always to be taken into account. The following type of table has been proved to be really serviceable. The tables are best made of white deal boards 8 ft. \times 11 in. \times $\frac{3}{4}$ in. Both the sides and edges of each board should be planed and the ends squared. Two boards will form a very convenient width for all purposes. If each pair of boards is dowelled deeply at the ends and in the middle and strengthened by battens 18 in. \times 2 in. \times $\frac{3}{4}$ in. a serviceable top is obtained. A thin strip of metal, mild steel or sheet iron, filed up accurately and screwed on the under surface of the table across the ends, greatly strengthens the table, for this is the weakest part and that which receives any knocks and blows. Fig 1 shows the under surface of the table. The second table should fit on to the first, a third to

the fourth, and so on ; hence the battens must be placed so as to be clear of each other, and the advantage of this method of fixing will be apparent in the packing (Fig. 2) ; the two outer battens must be placed well towards the end

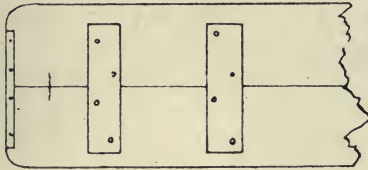


Fig. 1.

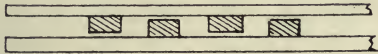


Fig. 2.

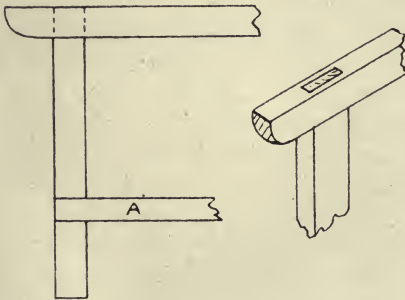


Fig. 3.

so as to lie outside the trestle. The trestles themselves can also be made if desired ; they must be light and withal fairly strong. Now to make thirty-two frames (sufficient for eight tables) is a rather large order, and will tax the resources of the Manual Room, for there are two mortise- and tenon-

joints in each frame besides the jointing of the cross-piece *A* (Fig. 3). It may be found that a joiner can supply these frames almost as cheaply as they can be made on the premises, in fact they have been obtained at ninepence for each bare frame. The cross-piece *A* may be jointed as at *B* or *C* (Figs. 4 and 5). The mortise-and tenon-joint at *B* is preferable as far as packing is concerned, but it is doubtful whether it is the stronger. At the modest sum of nine-

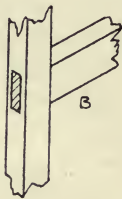


Fig. 4.

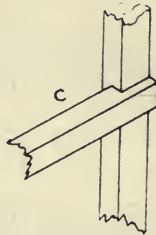


Fig. 5.



Fig. 6.

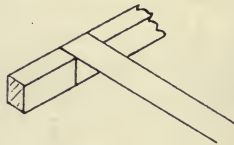


Fig. 7.

pence for one frame the joint was similar to that at *C* (Fig. 5), for that entailed less work on the part of the joiner.

It will be found that webbing is preferable to iron for the hinges ; there is no rust and less weight ; it is strongly recommended that the best webbing be bought. Nothing is so annoying in camp as to be constantly repairing. The webbing should be fixed at the top of the frames in the manner shown (Fig. 6), and again as in Fig 7 for the

'stride' of the legs. A little packing of leather placed between the tack-heads and the webbing will save money as well as worry. Having discussed the tables, seats now claim our attention. Boys can stand, but it is conducive to orderly and quiet working to allow them to sit. The designing of seats is not an easy matter if they are to comply with the conditions previously laid down. The following pattern, though somewhat primitive, has been found so far to give the best all-round satisfaction. The timber used must be 2 in. square and the first support

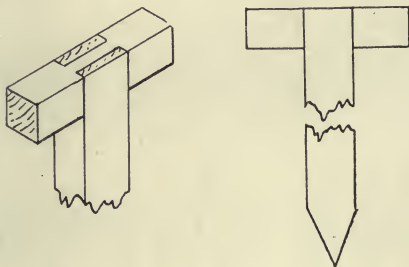


Fig. 8.

should be made according to the sketch (Fig. 8), the joint being a mortise and tenon, or a bridle one; the long post is 4 ft. long and pointed as shown. Two such supports are needed for one form; another stake should now be prepared, pointed as before but without the top member, its use being merely to prevent the seat-board from sagging. The seat-boards are made from white deal boards 9 in. \times $\frac{3}{4}$ in. It is very important in the erection of these seats to drive the supports in vertically; the elevation of part of the seat is given (Fig. 9). If desired the seat-board can be bolted down (Fig. 10), but this has its drawbacks. In wet weather the table tops are merely turned over and the seat-boards

are taken off and placed under the tables through the trestles ; now if seats are bolted down this cannot be done. Rectangular pieces of steel or iron nailed to the top of the supports in the manner shown (Figs. 11, 11 *a*) prevent the seat-boards from slipping away from their supports. A peg fitted into the top member, corresponding with a hole

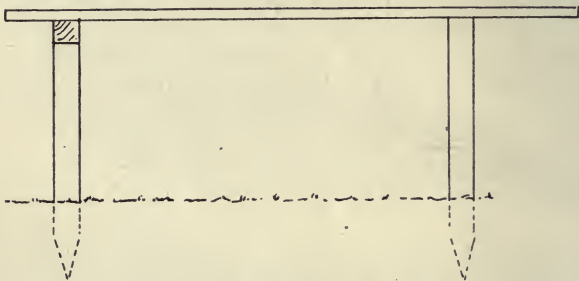


Fig. 9.

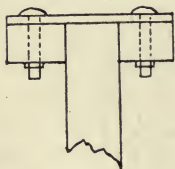


Fig. 10.

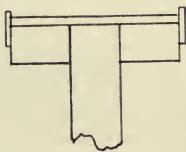


Fig. 11.

Fig. 11 *a*.

bored in the seat-board would also serve the same purpose. One great advantage of this form of seat is that it can be easily packed ; the centre posts are lashed together in bundles of nine, the supports in threes, and the boards in sixes.

Sanitary Equipment.—Latrines. The latrine is a structure that needs some thought and attention. Owing to the use of canvas for the screen it is often a very unstable

affair, especially in windy weather. The following design meets the demand (Figs. 12 and 13). All the posts and bars should be 2 in. square except *J* and *K*, these being 6 in. \times $\frac{3}{4}$ in. The posts *A*, *B*, *C*, and *D* should be 8 ft. long, pointed 9 in. and driven into the ground 2 ft. *G* and

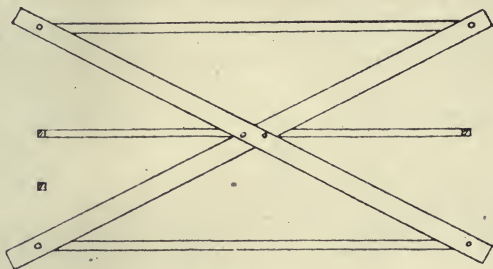


Fig. 12.

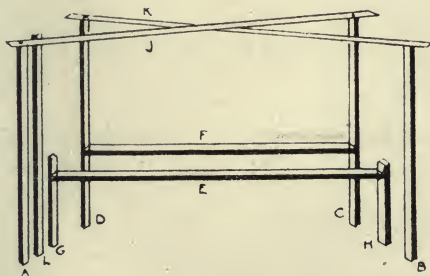


Fig. 13.

H are 3 ft. 6 in. long, pointed 6 in. and rest in the ground to the extent of 1 ft. 6 in., their distance from *D* and *C* being 2 ft. *F* is tenoned into *D* and *C*, and *E* into *G* and *H* about 1 ft. 6 in. above the ground (Fig. 13 *a*). Another post *L* along with *A* forms the doorway; all joints should be bolted with $\frac{3}{8}$ in. bolts. The upper ends of the posts *A*, *B*,

C, *D* are fitted as shown (Fig. 14). *A* is a piece of metal—mild steel or sheet iron—covering the top and extending down the sides of the timber 1 in., *B* is the threaded shank of a $\frac{1}{2}$ in. bolt, its head fitting into a hollow made for that purpose (Fig. 14 *a*); the hole in the plate should be square to prevent the bolt turning round with the spanner. The boards *J* and *K* are strengthened at the ends with metal plates filed to size, fixed as shown (Fig. 15), and pierced

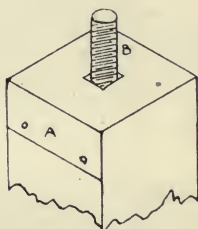
Fig. 13 *a*.

Fig. 14.

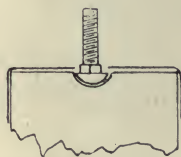
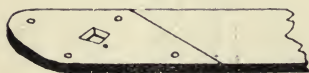
Fig. 14 *a*.

Fig. 15.

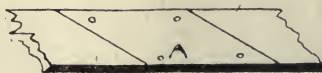


Fig. 16.

with a square or round hole to slip over the upturned bolt. The plate *A* (Fig. 16) is fixed on the centre of one of the boards and a similar one is fixed to the under surface of the second board, the two are then bolted together with a couple of bolts. This method of securing the roof boards, if carried out properly, does away with the use of guy ropes, which continually require attention. The whole structure is then canvassed round, leaving the opening or doorway between the posts *A* and *L*. When making any joints for camp furniture it is wise to mark with a definite colour the

complementary parts ; this ensures quicker erection on the day.

Washing Stands. It saves much time, worry, and dirt to have a washing stand for each tent rather than one trough for the whole camp, besides being more hygienic ; in fact the latter really needs the laying down of service water, and the proper construction of a soak-pit, whereas for the former a bucket will serve the purpose. The stand illustrated (Fig. 17) has been proved to be fairly serviceable, and it presents a capital exercise for the boys in the Manual Room

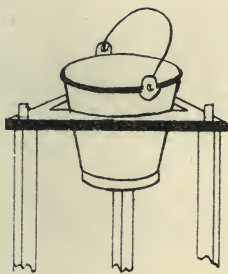


Fig. 17.

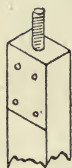


Fig. 18.

—always a further recommendation. It will be found that the boys will vie with each other in producing a first-class model. The stand consists of three upright stakes 2 ft. 9 in. \times 1 $\frac{5}{8}$ in. \times $\frac{3}{4}$ in., pointed, and fitted with metal tops as previously described for the posts of the latrine (Fig. 18). The table is made from three pieces of 2 in. \times $\frac{5}{8}$ in. timber, joined at the corners as open mortise-and-tenon-joints at angles of 60 degrees ; the ends are then plated on the top and the bottom with thin sheet iron and drilled to receive a $\frac{3}{8}$ in. bolt, so that the whole frame forms a tripod with a top capable of taking an average-sized bucket ; nuts are then

screwed down to keep the top firm. An alternative method of fixing the top is suggested (Fig. 20 *a*), where a small piece of mild steel is drilled, bent at right angles and screwed to the broader face of the post. The table is then bolted down to the plates. Before erecting the stand it is wise to apply a liberal dose of oil or grease to the bolts, for if wet weather prevails bolts become rusty, and difficulty is experienced when the camp is broken up. Various parts of the stand are illustrated (Figs. 17, 18, 19, 20).

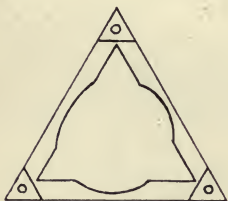
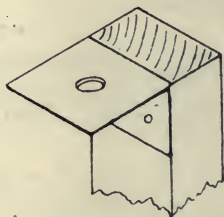


Fig. 19.



Fig. 20.

Fig. 20 *a*.

It will be noticed that quite a large number of objects are fitted with plates here and there; these are not absolutely essential, but they strengthen the objects considerably and thus prolong their life, at the same time providing; capital exercises in filing, drilling, and countersinking. If material is available the example illustrated (Fig. 21) suits the purpose well. It consists of three rods of $\frac{1}{2}$ in. round iron forged at one end as shown in the sketch (Fig. 21 *a*). A discarded metal rim about the diameter of the bucket at mid-height serves admirably. Such parts as those which have been mentioned can often be picked up for a small sum at a metal

broker's. A very simple and yet effective washstand can be made from a 'Tate' sugar box. Such a box can be used on the outward journey for the transport of goods (Fig. 22). If metal rods are not easily obtainable for washstands wooden posts 2 in. \times $\frac{5}{8}$ in. would suffice; the hook

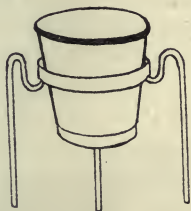


Fig. 21.

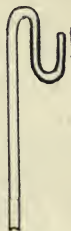
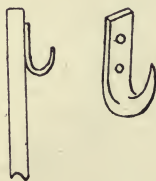
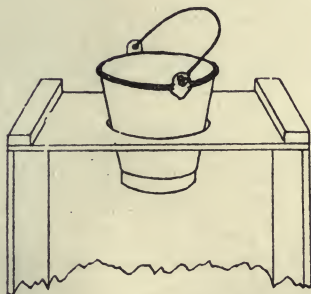


Fig. 21 a.

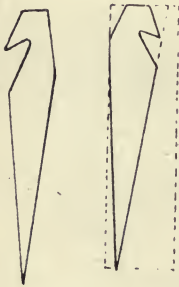


Figs. 22, 23, 24.

would then be forged similarly to that shown (Figs. 23, 24); it is made from $\frac{1}{2}$ in. round iron forged flat at one end and then drilled and countersunk. The hook takes the ring similarly to the one in a previous design. All the rods can be tied together when being packed, and the rings can be placed inside a bucket. Perhaps one will remark, Why go to

all this trouble in the preparation of a wash-stand when merely the bucket placed on the ground or on a box suffices? It is only another instance of that fine camping spirit, the broader aspect of which can be made to permeate the school in question from January to December. It brings another interest to the Manual Room in that the boy recognizes that his model is being made for a definite purpose in life—his own life. One will find when the above spirit is abroad it is difficult to keep the boys out of the Manual Room.

Tent Fittings. Tent pegs are also articles in constant demand; accidents are always happening to them, and a score or so of extra pegs will be found useful in case of storms, &c. They are best made of beech, oak, or ash, and should not be waste or knotty pieces, as, if so, they are liable to be broken at the first blow; the wood must be sound and the grain straight.



Figs. 25, 26.

There should be two sizes, one for the tent guy ropes and a smaller size for the curtains; a design is that shown (Fig. 25), the size of the larger peg being 14 in. \times $\frac{5}{8}$ in., and that of the smaller 10 in. \times $\frac{1}{2}$ in. A soaking in water for some time before use is beneficial to new pegs. Sharp edges chafe the guy ropes.

Two pegs can be cut from a rectangular piece of wood with very little waste (Fig. 26). When preparing for camp it is an advantage to pack the correct number of pegs for each tent in separate bags, this will prevent confusion and loss of time at tent-erection.

Every tent should possess its own mallet, and the con-

struction of this object forms a suitable exercise for the boys. The head should be 8 in. long and $3\frac{1}{2}$ in. in diameter; a hole, 1 in. in diameter, bored through the head receives the handle, which is wedged in the usual way (Fig. 26 a). A number burned on the head will save much inquiry respecting lost mallets, and all mallets should be strung together for transport.

Tent slides are occasionally split or lost, so it is advisable

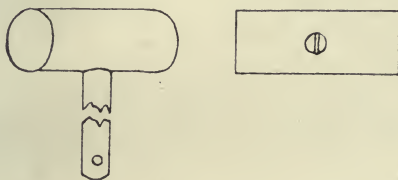


Fig. 26 a.

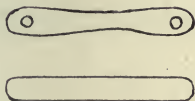


Fig. 27.

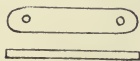


Fig. 28.

to have a few in stock; the shaping of them to a given curve serves as a good exercise for the younger boys; like tent pegs they are best made of hard wood and of a good thickness, $\frac{3}{4}$ in. The design shown (Fig. 27) meets the purpose. For smaller and home-made tents a simpler design might be adopted (Fig. 28), the thickness in this case being $\frac{3}{8}$ in.

Lamp Hooks. It is inadvisable and unsafe for lamps to be placed on the floor, and they are very little safer on

boxes. The diagrams (Figs. 29-33) are mostly self-explanatory and so detail of construction is therefore omitted. The design shown (Fig. 29) admits of an alternative. In the figure the arm is fixed and brazed to the band (Fig. 30), which is heated in the forge, then beaten round to a little less than the diameter of the tent pole—about 3 in., leaving 2 in. of straight metal for bolting-up purposes. A convenient length for the arm is 9 in., the iron, 1 in. \times $\frac{1}{4}$ in.,

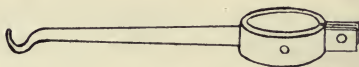


Fig. 29.

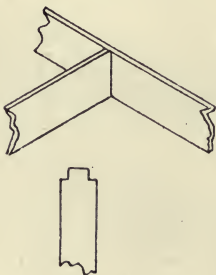


Fig. 30.



Fig. 31.

being drawn out at the end to the form of a hook. The alternative is shown (Fig. 31), where the arm is loose and the clinching of the band round the tent pole with a $\frac{1}{2}$ in. bolt also firmly fixes the arm. If the tents are one's own property a small hole drilled through the band will admit of the latter being further fixed by the insertion of a nail; this will prevent any slipping of the band. On the other hand, if the tents are hired the owners usually stipulate that nails must not be driven into the poles. Another, of simpler

design, is shown (Fig. 32). This is made throughout of $\frac{1}{2}$ in. rod iron; the end is drawn out in the forge in the form of a hook; 9 in. is marked off and bent at right angles. The rod is then placed in the ground near the pole and bound to the latter with string or wire; this will keep it upright. This design can be modified by employing supports of wood instead of iron; in this case it would be necessary for the arm to be altered somewhat to enable it to be fixed to the wooden post. One end of the arm should be heated and hammered flat for about 3 in.,

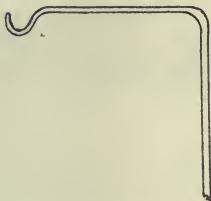


Fig. 32.



Fig. 33.

then bent at right angles, drilled, and countersunk; the other end should be forged into a hook (Fig. 33). It is recommended that all lighter posts be of the same size for convenience in packing. Rectangular-shaped posts are preferable to round ones, as the latter are more difficult to pack tightly, take up more room when packed, and are not as firm in the ground as the rectangular ones. It is necessary that all stakes be slightly pointed in order to facilitate the driving of them into the ground. A plentiful supply of hooks prevents an unsightly litter of clothes lying about; they are very convenient for hanging and drying damp clothing, for the orderly disposal of haversacks, bags, boots.

These hooks or hangers are made somewhat on the same principle as lamp brackets. They may take the form of the designs illustrated (Figs. 34, 35, 36), and it will be seen that in each case the band is fixed tightly round the pole with nut and bolt. In Fig. 36 two arms similar to the one shown in Fig. 31 are used.

It is not advisable to have oil lamps, nor is it always possible to obtain them. The presence of oil in tents causes uneasiness to the masters, and so, in order to mitigate the anxiety, it is recommended that candles be used if lights are necessary; short, thick carriage candles



Fig. 34.

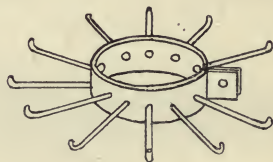


Fig. 35.



Fig. 36.

are more serviceable than the ordinary kind. Here, again, any simple kind of bracket or home-made lamp is far preferable to the naked light standing on a box. A few suggestions may be obtained from the sketches (Figs. 37 to 41). In the first design the back is made of wood 6 in. or 7 in. high, on which a reflector of tin is fixed; the base is made from a piece of wood 4 in. \times 4 in. \times $4\frac{3}{4}$ in., bored with a hole to take the particular size of candle; a slight 'surround' to collect the candle drippings is nailed to the base (Fig. 41). Fig. 37 illustrates one made out of a cocoa tin. The sides of the tin are cut with the shears as shown (Fig. 38), and then bent back to form a handle (Fig. 39). Holes are then drilled to allow the heat to

escape ; next a piece of tin should be soldered on the inside of the lid to receive the candle (Fig. 41), and also the lid should be soldered to the body (Fig. 40).

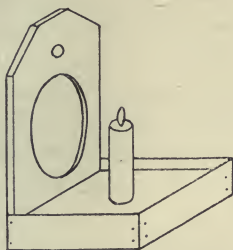


Fig. 37.

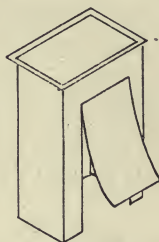


Fig. 38.

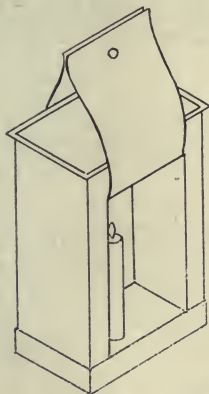


Fig. 39.

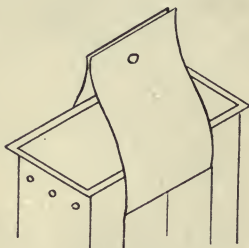


Fig. 40.

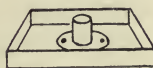


Fig. 41.

Tables or stands for use either inside or outside the tent do not comprise part of the necessary stock, but a paragraph is devoted to them as showing the initiative and originality of the boys as regards the requirements and the fittings of the tent ; on one occasion they were the

outcome of a healthy spirit of rivalry shown as soon as the occupants of the tents were settled. The following notes are for the guidance of those who wish to make and use them. The available space determines to some extent their design, and hence they must, of necessity, be somewhat limited in size. A table which is so constructed that it surrounds the pole will probably suggest itself first to the boys, for this is the most convenient place in the tent (Fig. 42). The top, 22 in. in diameter, is fixed with ordinary hasps (Fig. 44); the legs can be either round, rectangular,

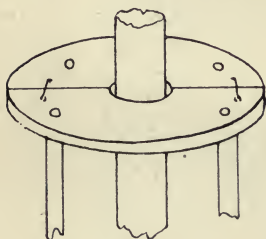


Fig. 42.

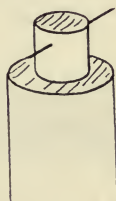


Fig. 43.

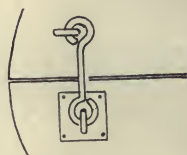


Fig. 44.

or square, and pointed slightly; the diameter of the upper end of each leg is lessened slightly to form a peg (Fig. 43) which slides through a hole bored in the top of the table; a long nail running through the projecting portion of the peg will tend to make the table more rigid. The design shown in Fig. 45 has the advantage in that it can be pitched anywhere—out of doors if fine, indoors if wet; the base or bottom disk is used merely to keep the object upright; the two disks are kept in position by a couple of long nails piercing the post. There is also the folding table, which can be packed well (Fig. 46); the top and legs are separate. *A* and *B* are two pieces of wood 1 in. square, bored to take a $\frac{3}{8}$ in. bolt and wing nut at their

intersection; the extremities of the legs are cut to the correct angle, and the battens *D* and *E* are placed to allow for a sufficient stride of the legs; *F* and *G* are two battens connecting opposite legs.

Clothes-lines are very useful for drying towels and bathing

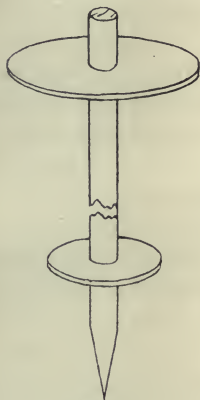


Fig. 45.

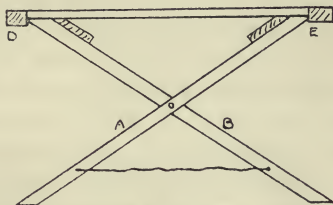


Fig. 46.

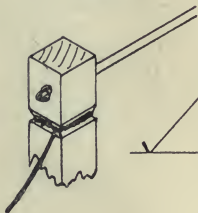


Fig. 47.

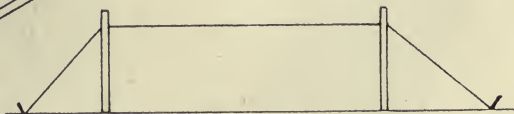


Fig. 48.

costumes, for airing blankets, &c. One for each tent will be sufficient. Two posts are required 3 ft. 6 in. \times 2 in. \times 2 in., with a hole bored near the top for the cord (preferably cotton rope) to pass through. Two guys and two small pegs make the erection stable; the posts should be driven 1 ft. into the ground (Figs 47, 48).

Mauls. This very important and useful piece of apparatus can be made easily and cheaply. If possible, one should obtain a round log from the wood-turner's; a discarded wringing-machine roller will suffice or a waster roller. It should be arranged for the log to be cut and turned to the proper size and shape required; this would only be a few minutes' task. In order to prolong the life of the maul it is necessary that the head should be tined or hooped. The hoops should be made from $1\frac{1}{2}$ in. \times $\frac{1}{4}$ in. wrought iron, and their diameter should be slightly smaller than the ends on which they have to be fixed. Each hoop should be heated to a dull red and forced on the maul head, which should then be plunged into cold water. Holes may now be drilled through the hoops, countersunk, and the hoops fixed by means of $\frac{3}{4}$ in. screws. The head should now be bored to receive the handle, which must be made of tough wood—ash—and after it has been forced through the head it should be wedged in the usual manner.

CHAPTER VI

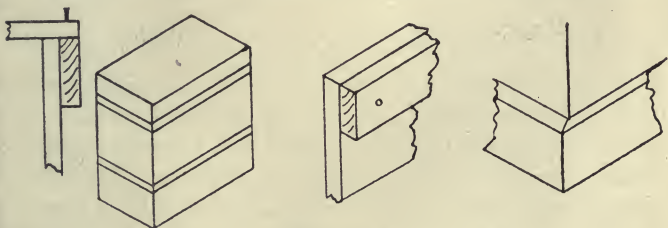
THE MAKING OF CAMP EQUIPMENT

(continued).

Small Kitchen Utensils — Braziers — The Kitchen — The Hand-cart.

Wooden Rods or Porridge Stirrers. Two or three 'thybals' (as these are called in the North) are required. They provide good exercises for the younger boys, for the exact shape can be determined to suit the abilities of the class. It will be found that the construction of any cooking apparatus is always of special interest to the boys.

Wooden Spoons. These should be similar to those used in jam-making, but in this case they are designed for serving out porridge; they present a difficult exercise in modelling in wood. Three or four spoons will be sufficient.



Figs. 49-52.

Boxes will be required for conveying the kitchen apparatus, food, &c.; these will probably be obtained from the local stores. Bryant and May's cases, Tate's sugar boxes, ham boxes, tea chests, are all suitable. These boxes may be in a more or less damaged condition, and so may require

overhauling and, in any case, strengthening. Corners should be protected, for these are the places where the damage begins. Cheap garth iron comes in useful and can be obtained from a cooper or blacksmith. The box should be strengthened as shown (Figs. 49 to 52) both at the top and at the bottom; the wood needed (and the nails) can be obtained from other boxes carefully pulled to pieces. A substantial lid should be made and fixed down by means of $1\frac{1}{4}$ in. screws.

Braziers. No matter what sort of cooking-stove a camp



Fig. 53.

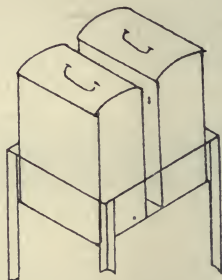


Fig. 54.

possesses, a brazier is always acceptable. Its usefulness is seen in the cooking of porridge for breakfast, potatoes for dinner, and at any time when the kitchen range is required for roasting. As to the quality, this is not a serious consideration so long as the design fully meets its purpose. If braziers can be borrowed yearly it is not advisable to make them, for they require storage room during the greater part of the year. The primitive idea of a bucket placed upon a couple of bricks is not advocated, for this is a very unstable affair, and an accident or an upset may spoil a breakfast. Braziers are not difficult to construct if

the Manual Department possesses a good drilling-machine and a forge. It will be found that braziers of a rectangular shape are generally more convenient than circular ones, especially if constructed to take two pans or kettles (Fig. 54). It is a good plan to obtain the kettles first and make the braziers to suit them; an average size would be—height 2 ft., depth of fire-space or grate 9 in., length 24 in., breadth 20 in.; the fire-bars should be 1 in. \times $\frac{3}{16}$ in. Six pieces of 1 in. angle iron, sawn to the requisite length, will be

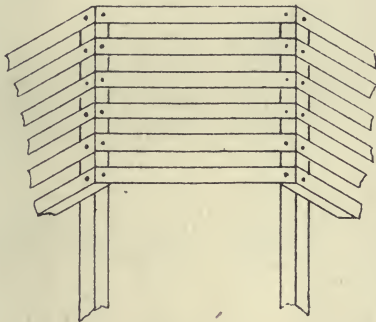
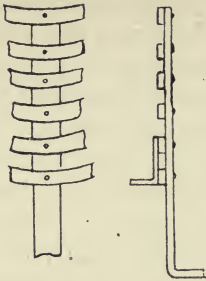


Fig. 55.

required. Holes $\frac{1}{4}$ in. diameter are drilled in the fire-bars, and correspond to holes drilled in the angle-irons; the rivets are heated in the forge, and the whole fixed together as shown (Fig. 55). The bottom or sixth fire-bar on either side is also an angle-iron, and serves as a runner for the fire-grate to rest upon. This grate should be bored with holes $\frac{3}{4}$ in. diameter, twelve to sixteen in number. A thin piece of sheet-iron is often useful to place on the top of the fire when a slow heat is required; it should project 1 in. beyond the brazier on all sides. If round braziers are



Figs. 56, 57.

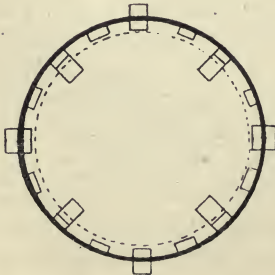
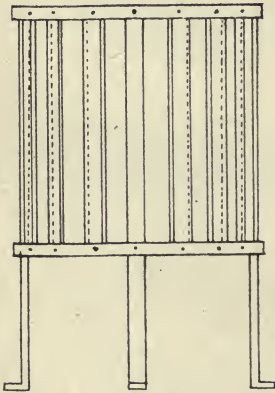


Fig. 57 a.

required, they are made very much on the same lines as the foregoing (Figs. 55 and 56). Instead of two angle-irons serving as runners, four pieces of bar iron 6 in. long are required. These should be heated and bent to form angle-irons which, when drilled and riveted to the uprights—as shown in the sketch—serve as rests for the fire-grate. An alternative design is shown in Fig. 57 a. As cover-plates become very hot, dusters are of no use for handling them. To overcome the difficulty two slots, 3 in. \times $\frac{3}{4}$ in., should be drilled and filed in the cover-plate. Carriers similar to the one shown (Fig. 58) should now be forged from $\frac{1}{2}$ in. round iron, the arm being $2\frac{1}{2}$ in. long and the handle big enough to admit the hand easily. In order to obtain a firm grip a pair of these carriers will be required, and their manufacture will provide good forging exercises for more advanced pupils.

A couple of pokers will meet the ordinary requirements, namely, a long one

2½ ft. and a shorter one 18 in., each having a simple bowl-handle (Fig. 59).

A small coal-rake for cleaning out the flues of the stove is necessary; the simpler the design the better (Fig. 60). The plate should be of mild steel 3 in. × 2½ in., and the handle of $\frac{3}{8}$ in. rod iron, flattened in the forge and bent over at right angles. This portion is drilled and riveted



Fig. 58.



Fig. 59.

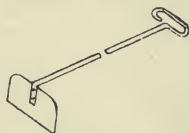


Fig. 60.

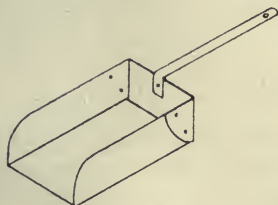


Fig. 61.

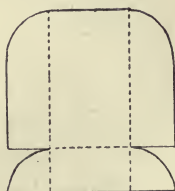


Fig. 62.

to the plate in two places, the other end of the rod being forged into a suitable handle of simple design.

A small shovel specially made for the purpose will meet requirements better than one purchased. A design which can easily be made by boys is illustrated (Fig. 61) as the diagram is self-explanatory; only the measurements need be detailed—scoop 12 in. × 6 in. × 3 in., handle 9 in.—the development of the shovel is shown (Fig. 62).

The Kitchen. It is surprising how readily ambition enters a school camp. A kitchen is often one of the later acquisitions and may almost be regarded as proof of a series of successful camps. It (the kitchen) is not really essential in genial dry weather, but if rain prevails cooking in the open is wellnigh impossible, and in our island one must take into account the various climatic changes which may occur. Camp kitchens are often very clumsy and far from rigid; they are seldom waterproof, and generally rely for

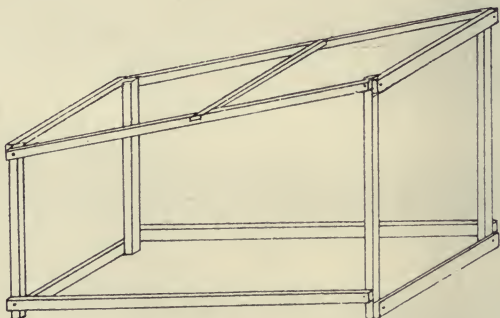


Fig. 63.

comfort on the fine weather. If a small marquee can be bought so much the better; if not, the following notes may be suggestive of lines upon which to work.

The size of the kitchen should be such as to contain comfortably a camp trestle-table, a form or seat alongside it, and a row of boxes containing 'pots and pans' along the other side; these boxes serve, in an emergency, as seats. Four posts of 3 in. \times 3 in. material, one pair 8 ft. long and the other 6 ft. long, are needed for the corners of the erection (Fig. 63), and eight boards, 6 in. (or preferably 9 in.) \times 1 in. and of the correct length according to the length of the

sides of the kitchen. These are fixed to the upright posts with $\frac{1}{2}$ in. bolts (Fig. 64), a light spar, placed across the middle of the roof, being fixed as shown (Fig. 65). Nails should not be used, as their use renders dismemberment of the structure difficult. Second-hand tarpaulins can be obtained from some army contractor; they are sold of the size 72 in. \times 36 in. and are eyeleted. Four or five of these

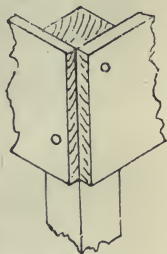


Fig. 64.

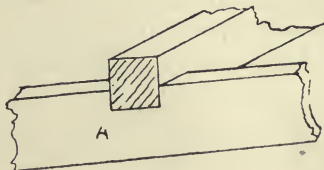


Fig. 65.

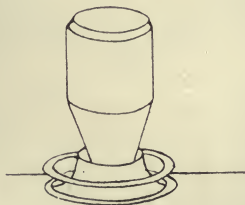


Fig. 66.

will serve for one end, and the tops should be re-shaped to fit the frame of the kitchen; in this case they will need re-eyeleting. Eyelets can be obtained at a cobbler's wholesale stores and can be inserted as follows. A hole must be cut in the material slightly smaller than the eyelet and the shank of the eyelet forced through; by placing the rim over it, the eyelet may be spread by means of a suitably made punch (Fig. 66). Curved hooks screwed into the cross-piece at the

top will serve as attachments for the tarpaulins, and thus the use of nails may be dispensed with. The edges of the tarpaulins can now be corded together to form one wall. If funds will allow, sufficient waterproof sheets should be purchased for both ends, as otherwise a change will have to be effected when the wind alters. The back of the kitchen will be mostly taken up with the stove, and the amount of space to be covered in depends on the size of the stove and the nature of the background—whether earth, wall, or bank. In certain places in the camp field a little digging will probably have to be done; the turves should be cut carefully

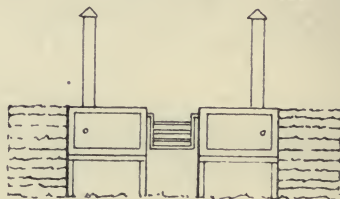


Fig. 67.

and stacked to form a wall on both sides of the stove and, if they are in sufficient quantity, at the back as well. This will form a 'packing' and will, in a slight measure, conserve the heat. A few sheets of corrugated iron form a very suitable roof, and if the sheets are tarred shortly after purchase they will remain sound for several years. They may be arranged on the roof as shown (Fig. 68), with allowance for overhanging 4 in. or 5 in. at the front and the back, and for overlapping each other to the extent of one roll; the cross-spar will prevent any sagging in the middle. These sheets should not be nailed down to the frame but kept in position with hooks of the design shown (Fig. 69); they are easily fixed and taken down; the hooks themselves can be

forged out of any scrap iron or strong garth iron 1 in. wide, drilled and countersunk and fixed after the roof has been laid. A rope slung across the middle of the roof and weighted with stones will prevent any lifting of the sheets by the wind. As an alternative to the corrugated sheets and tarpaulins one may be fortunate enough to obtain a large railway-wagon cover; these are capital things, and possibly one can be purchased at second hand of sufficient

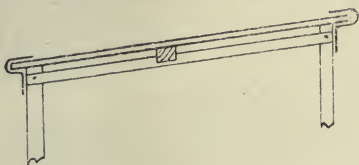


Fig. 68.



Fig. 69.



Fig. 70.

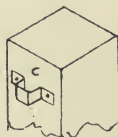


Fig. 71.

length to cover both ends and roof. These covers can generally be hired at railway goods stations.

It is suggested in another part of the book (page 91) that 'basket ball' is a suitable game for camp. The apparatus required is not difficult to make. Two posts are necessary; it is not essential that they should be extra long or strong, 8 ft. \times 2 in. \times 2 in. will serve the purpose, 1 ft. being buried in the ground and the earth pounded down firmly. An iron hoop made from 1 in. iron, forged and welded as in sketch (Fig. 70), will be required for each post. The piece of metal *A* riveted on to *B* slips into the socket *C* (Fig. 71),

made with 1 in. mild steel and bent at right angles as shown; the netted bag may be dispensed with.

The Hand-cart. The usefulness of a hand-cart at camp will be apparent to every one; numerous journeys have usually to be made which necessitate the carriage of goods, a parcel of overdue blankets from the station, groceries from the village stores, boys' luggage, a bag of coal or coke. To carry these by hand proves both irksome and laborious, and it is with the object of easing these

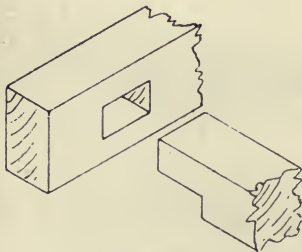


Fig. 72.

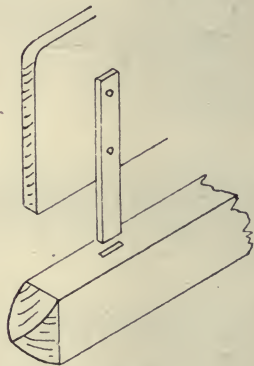


Fig. 73.

labours that the following suggestions are made. It is a mistake when designing a cart to make it too large and heavy; one must remember that on most occasions the boys will have to do the hauling, and moreover it is not intended that the cart should form the sole means of transport. Another important consideration must be its easy dismemberment, for the carriage of wheeled vehicles intact on railways requires a special rate. A handy size for the model would be 2 ft. \times 3 ft., but here again the size would depend on the camp's stock; for example, assuming that

one possesses a field stove, the cart should be capable of conveying it, for it may happen that circumstances compel its removal to another part of the camp field. The frame should be made first, the sides being 3 in. \times 3 $\frac{1}{2}$ in. placed on edge and the spendings or cross-pieces 2 in. \times 1 $\frac{1}{2}$ in. with 1 in. tenon and jointed as shown (Fig. 72). The upper face of the spending should be $\frac{3}{4}$ in. below that of the side piece to allow for $\frac{3}{4}$ in. floor. The side boards should be 9 in. \times 1 in.

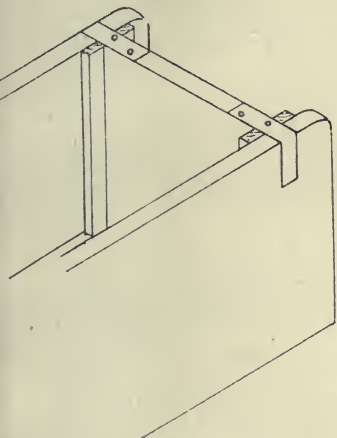


Fig. 74.

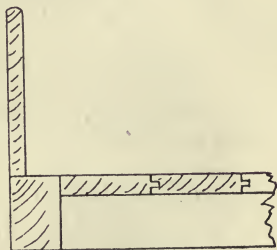


Fig. 75.

the iron standards slotting into mortises in the frame, thus bringing the outside of the board flush with the side of the frame. These standards may be forged 8 in. \times 1 $\frac{1}{2}$ in. \times $\frac{1}{4}$ in. from wrought iron ; then drilled and fixed as shown (Fig. 73). The back and front boards are merely slotted down between two pairs of battens, and the side boards clinched with a couple of angle-irons 6 in. long on top and dropping 1 $\frac{1}{2}$ in. or 2 in. down the sides (Fig. 74). The bottom boards of the cart should be 4 $\frac{1}{2}$ in. \times $\frac{3}{4}$ in., tongued and grooved and nailed as shown (Fig. 75). The pole or shaft should be

$2\frac{1}{2}$ in. \times 2 in. \times 6 ft. and shaped as in Fig. 76, the cross-bar being 6 in. from the end and projecting 9 in. on each side of the shaft. To provide for extra haulage with ropes a piece of round wrought iron $\frac{5}{8}$ in. diameter should be forged flat at either end to the extent of 3 in., drilled, countersunk, and fixed as shown (Fig. 77). The front socket for the recep-

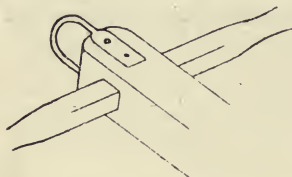


Fig. 76.

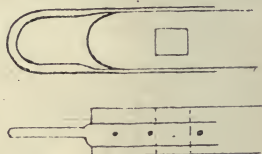


Fig. 77.

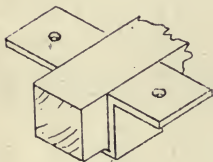


Fig. 78.

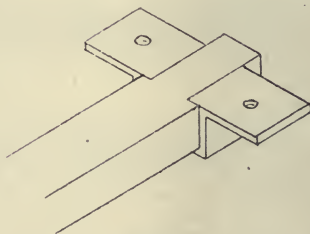


Fig. 79.

tion of the pole can be made from $\frac{1}{4}$ in. wrought iron, the inside measurements being $2\frac{1}{2}$ in. \times 2 in.; this should be bolted to the front spending of the frame (Fig. 78). The rear end of the pole could be finished as illustrated (Fig. 79) and the socket made accordingly; it would be convenient for the socket to be bolted to the middle spending of the frame and to allow the tenon to project a little. To prevent the pole from working out of the sockets, a pin of the design

shown (Fig. 80) should be placed as in Fig. 81; this can be fastened with a light chain to the under surface of the cart; when in use the hinged part drops by its own weight, thus securely locking the pole. The pin itself can be forged from two pieces of $\frac{1}{2}$ in. round iron, the end of one piece being forged flat to form a sort of tenon and a mortise sawn in the other piece to receive it; the joint is then drilled and a cotter-pin inserted. The construction of this little piece



Fig. 80.

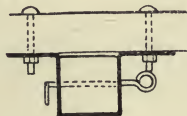


Fig. 81.

of apparatus forms a very neat exercise for older boys.

It will be found necessary to purchase springs, axle, and wheels, and when the order is written the following particulars should be given:

Springs. Width, thickness, and number of plates, length, length centres (distance between the eyes), size of eyes, compass (depth of the spring from the horizontal at its lowest point).

Axle. Size, distance between solid collars, length of bush.

Wheel. Diameter, width of face, size of spokes, size of axle.

In the assembling of the springs, axle, and wheels, several parts are needed, some of which can readily be made by the boys with the occasional help of the master.

There are dumb Jack scroll irons which are fixed to the under part of the frame, and to which the springs are

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attached. They may be made as follows: to a piece of wrought iron 10 in. \times $\frac{3}{8}$ in. (the width depends on the width of the spring) is welded a piece at right angles (Fig. 82); the ears or the lugs are cut off to the required length, 2 in. for those of the front scroll iron and $2\frac{1}{2}$ in. for those of the back one (when measuring allowance must be made for bending). One lug must now be pierced with a square hole

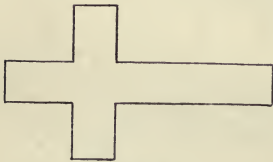


Fig. 82.

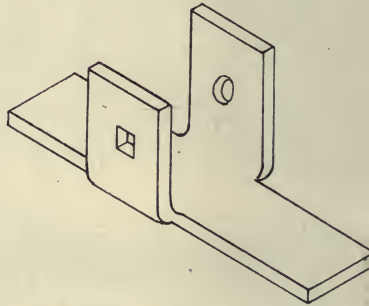


Fig. 83.

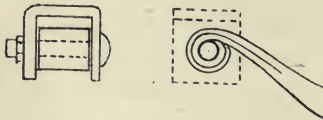


Fig. 84.

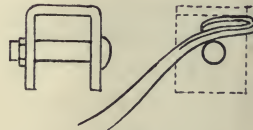


Fig. 85.

and the opposite one with a round hole; the lugs must be bent at right angles away from the welded surface (Fig. 83). It will be noticed that the tail is longer than the head.

The spring suitable for the purpose in hand should have four laps $1\frac{3}{4}$ in. or 2 in. wide and one end slaped; the other end fits between the lugs of the scroll iron and is bolted up in the manner shown (Fig. 84); the slaped end fits into a scroll iron but has a free-way on which to move (Fig. 85).

The method of fixing the axle to the spring is shown in Fig. 86. *A* is a four-lap spring pierced by a conical-headed bolt *C* and tightened up with the nut *L*. *D* is hard-wood packing placed between the axle clip *F* and the spring *A*.

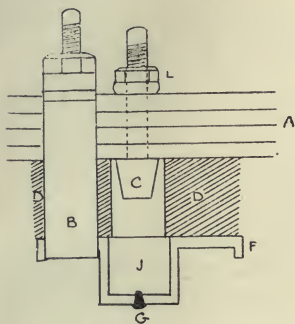


Fig. 86.

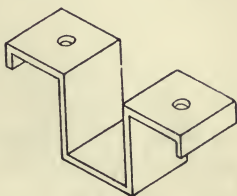


Fig. 87.

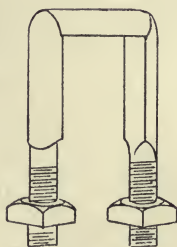


Fig. 88.

Another view of the axle clip is given (Fig. 87). *G* is a steel peg piercing *F* and resting tightly in a corresponding hole drilled in the axle *J*; this keeps the axle clip in position when fixed. *B* is the spring clip and binds the axle to the spring *A*; the full view of the clip is shown in Fig. 88. The clips are fixed by clip-couplings, the dimensions of

which vary according to those of the spring clip (Fig. 89). The axle is shown in part in Fig. 90; *A* is the bush (see also Fig. 91), *B* the collar of the bed, which for our purpose

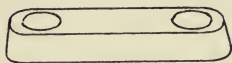


Fig. 89.

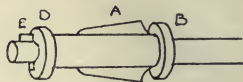


Fig. 90.

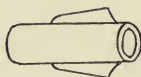


Fig. 91.

is square; *D* is a washer, and *E* a cotter-pin. The nave of the wheel should be bored and housed to receive the metal bush easily; this is then so wedged as to ensure that its centre and the centre of the wheel coincide.

CHAPTER VII

DAILY ROUTINE IN CAMP

Time-table — Duties.

WHAT should be the daily routine of camp life is largely a matter of individual opinion. In this chapter the authors propose merely to discuss the questions on broad lines and to indicate what they have found to be satisfactory. It is by no means easy either to formulate a rigid scheme or to adhere to it when formulated ; nevertheless, it is important that the general outlines of each day's programme should be drafted beforehand. The ever-present uncertainties of the English climate must be reckoned with, and the age of the boys will also be an important factor in determining exactly what course to pursue.

Generally speaking, the programme for each day divides itself into three sections :

- (1) Excursions.
- (2) Organized games and sports.
- (3) Free-time.

Excursions occupy the first place ; they take up the whole of the mornings from 9.30 a.m. to 1 o'clock, and occasionally the whole period from breakfast to tea or late dinner. The former may be taken as the normal arrangement, when the afternoons will be devoted to games. After tea the boys are at liberty until supper-time.

The programme for a week will arrange itself somewhat as follows :

	<i>Morning.</i>	<i>Afternoon.</i>	<i>Evening.</i>
FRIDAY	Arrival in camp and completion of arrangements.		
SATURDAY	Excursion	Games	Free-time.
SUNDAY	Service and Short walk	Excursion	Free-time.
MONDAY	Excursion	Games	Free-time.
TUESDAY		Excursion	Free-time.
WEDNESDAY	Excursion	Games	Cricket match.
THURSDAY		Excursion	Sports or Free-time.
FRIDAY	Excursion	Sports (Visitors' Day)	Sports.
SATURDAY	Packing and Departure.		

The time-table for an average day may be arranged on the following lines :

Réveillé	7.0 a.m.
Tent inspection	7.45 a.m.
Breakfast	8.0 a.m.
Cleaning up	8.45 a.m.-9.30 a.m.
Excursion	9.30 a.m.-1.0 p.m.
Dinner	1 p.m.
Rest period.	1.30 p.m.-2.30 p.m.
Games and sports	2.30 p.m.-5.0 p.m.
Tea	5.0 p.m.-5.30 p.m.
Free-time	5.30 p.m.-8.30 p.m.
Supper	8.30 p.m.-9.0 p.m.
	Camp sing-song.
Lights out	10.0 p.m.

As has already been stated, the times cannot be rigidly observed, but they are approximate and are based on our yearly camp practice. There is nothing gained by keeping the early riser in his tent until réveillé, and it will be found that some boys are always up and out before that hour. There is no harm in this, always provided these boys do not disturb the sleepers or leave the camp. It

will also be found that some boys wish to retire immediately after supper, and as the days pass and the active life and pure fresh air produce their full effect very few boys will be found moving about the camp after 9.30 p.m. Every boy must be up and dressed as soon as possible after réveillé, and busy cleaning up for inspection. There is much to do; personal belongings to be cleared away, ground-sheets and blankets to be folded up neatly or put out to air, according to orders and the state of the grass and weather. The immediate vicinity of each tent must be cleaned; waste paper, bottles, boots, and the hundred and one things dear to the heart of a schoolboy must be removed. The skirt of the tent must be neatly furled, and pegs and ropes inspected. If the weather is hot the ropes will slack during the day and should therefore be tightened up, due care being taken to see that they are eased off again at night.

The tent is the boy's home, and in all probability it is the first time, or at any rate the only time throughout the year, that he can feel he has a home of his own, the proper management of which rests with himself. This feeling is a great inducement to him to take a pride in its appearance, and tents are generally kept spick-and-span. There will always be the slacker, the boy whose sense of ownership and responsibility is dull, and who has never previously been called upon to exert himself either on his own behalf or on that of others. Needless to say, the other members of the tent family will teach him a valuable lesson pretty quickly, more pointedly, perhaps, and probably more effectively, than a lengthy discourse from a teacher would do.

Camp being all in order, the next business is breakfast. Bread and butter will almost certainly be one of the items on the menu, and its preparation for a large number is

tedious. Unless a mechanical bread-cutter is used it is not an easy task to perform successfully. After a day or two boys apt for the work will usually be discovered, and it is advisable to allocate this little duty to these particular boys for the remainder of the time, due allowance being made in the case of some other duty. If the dining-tables are made so that each one accommodates a tent company, then the occupants of each tent can have their own table and be held answerable for its condition. After tent inspection the tables will be prepared for breakfast, they will be turned over from night, and brushed or rubbed down. Scrubbing tables is a duty reserved for later in the day when the sun is hot.

A duty requiring immediate attention after breakfast is potato-peeling. In a camp of sixty persons some twenty-eight pounds will be required daily, and the responsibility for their preparation rests with the tent-captains, who will make their own arrangements with their respective companies. The cook will require an ample supply of water for the day, and, if storage is available, sufficient should be obtained to satisfy his requirements for the next twenty-four hours. A dairyman's milk-float, of a capacity of twenty or thirty gallons, is a most useful asset in camp. It serves both for water carrying and storing. One can usually be hired for a few shillings, or the making of a framework for a similar contrivance might be attempted in the Manual Room.

It is advisable to arrange for some person to remain in charge of the camp when the party is away on Excursions. If a cook is present he will generally suffice, otherwise some member of the Staff should stay behind. It may be that a boy is slightly indisposed, footsore; &c., in which case he cannot undertake the Excursion and must be left

in proper charge. There is also the danger of pilfering by outsiders if the ground is left unattended.

A very important part of the day's programme is the Rest Period, and this, following dinner, should be rigidly observed. It is not a time for boys to do as they choose, but a period of definite rest and quiet, and it should take the form of retiring to the tents or lying quietly in the shade. For the first day or two this may appear irksome to the more active boys, but later it will be fully appreciated. Its restorative and tonic value in helping every one to maintain their full vitality up to bedtime cannot be too highly estimated.

On organized sports it is hardly necessary to dwell. They include the usually pre-arranged matches and contests between various units of the camp and perhaps a cricket match with a local team. It is desirable that every boy be given a fair chance to engage in some sport or pastime during the whole of the games period, and the opportunity of inculcating the value of 'team-work' should not be lost. If apparatus for games is not available, 'Hare and Hounds' is a fine game for a whole afternoon, and one in which every member of the party can co-operate. Leap-frog and Rounders also produce much fun and provide good all-round exercise. Some modified form of Basket-ball may also be introduced. Bathing is a vexed question. There is always an element of danger present, and accidents so easily occur. Should bathing be permitted, a good rule to observe is that no boy or boys must enter the water unless accompanied by at least one of the masters. It is also advisable for another master to be on the beach who can keep his eye, as it were, on the outer line of bathers. The time for bathing cannot be definitely fixed, it may depend upon the state of the tides, and it is also a matter of personal opinion.

In order to ensure proper surveillance throughout the day it should be a rule that no boy may leave the camp field without first obtaining the permission of one of the masters. This rule is relaxed after tea, when Free-time comes into operation and boys are at liberty to go whither they will, except in or *on* water, for the next two or three hours. Many boys will visit the village and chum in with kindred spirits, or there may be another camp within reasonable distance in which some will be interested. Such little acquaintanceships have their value, the arrangement of a friendly cricket match may ensue, or the exchange of a later period of letters and school magazines.

Supper need not be a formal meal. It is not a meal in the ordinary sense, and may be eaten in any part of the camp and in any company. As it usually consists of a cup of cocoa or milk taken with a bun, the boys like to sit about in the cool of the evening and partake of it leisurely, whilst discussing their plans and private affairs before turning in for the night.

At 10 p.m., a final round of the camp by the masters, a glance into each tent to see that all the occupants are properly and comfortably settled down, an inquiry as to the welfare of any particular boy if necessary, an external inspection of the tent to ensure that all is in order, and a cheery 'Good-night, boys', ends a strenuous and healthy day in camp.

CHAPTER VIII

GENERAL CAMP AFFAIRS

Discipline — Age — Health — Sundays — Visitors' Day.

IN this chapter a few further details relative to camp management are dealt with, which, though not appertaining directly to camp routine, and to a great extent subsidiary, come within the field of the work. They are matters upon which no attempt is made to dogmatize, but the authors have tried to bring them before the reader's notice for his consideration and judgment.

The subject of discipline is always to the fore in a teacher's mind. Discipline in camp is not difficult to maintain. The parents' attention is drawn to the matter in the circular and their co-operation is sought. The boys are away from home and in a strange land, they are surrounded by new and enjoyable experiences, they are living a 'bigger' life than when at home, and are animated by *esprit de corps*, all factors conducive to securing an easy and natural discipline. They soon enter fully into the spirit of camp life and render willing and cheerful obedience to orders. There is a feeling abroad that camps tend to foster a military spirit. As a body teachers are opposed to militarism, and there is no reason whatever that anything of a military nature should be introduced. Education in its broadest and best sense is the key-note of a school camp, and if this is always borne in mind any suggestion of militarism can be combated.

The age at which a boy should begin camping requires careful consideration. The authors have camped with their own children when the maximum age was four years and the minimum ten months, so that, it may be said, there is really no age at which a child is too young, everything depending upon the circumstances. Such tender years as these, however, do not enter into the problem when the conditions are those which obtain in a school camp. Eleven years of age is about the safe minimum, and even then it is probable that a boy of fourteen will derive greater benefit than a boy of eleven. Young children are more sensitive to chills, &c., than older ones, and would suffer more acutely the minor inconveniences of camp life should these become in any way exaggerated. Moreover, under the age of eleven a child can hardly be regarded as competent to look after himself in the way that he is called upon to do in camp. This means that a camp of young children would be a great burden and responsibility upon those in charge. Manual work is not usually taken up in school until a boy is about eleven, and so the assistance rendered by this subject is lost. Between the ages of eleven and sixteen a boy rapidly develops. He begins to appreciate responsibility and to develop a feeling of independence; possibilities of his capacities crowd into his mind, and camp gives him a chance of testing himself and of realizing his abilities and his shortcomings. Thus, while no age may be too young from a hygienic standpoint for a child to begin the outdoor life, nevertheless the benefits to young children are limited, for they are not sufficiently mature to withstand the rigours of the life.

The limit of the incompatibility of the age of different scholars also requires consideration. In school, boys are,

to a large extent, in watertight compartments according to their ages, but in camp such a condition does not apply. All boys are then alike, they feed alike, sleep alike, and work alike, and it is obvious that a youngster of ten is handicapped alongside a youngster of sixteen. Therefore, unless distinct arrangements can be made to allow for marked differences of age, it may be better to keep the age within small limits. A difference of three years is ideal, boys between eleven and fourteen or twelve and fifteen work well together. If these limits cannot be maintained, and if the total numbers warrant it, the best solution is to establish a junior and senior camp.

Following upon the matter of age the distribution of the boys in the tents can be dealt with. As far as possible responsibility will be shared and graded so that every unit of the camp takes up some definite duty. This means that there must be a senior boy or 'charge boy' or captain of each tent who will be held responsible for elementary matters of discipline. To arrange this two methods suggest themselves: either to allocate a certain number of boys to a tent and place a senior boy in charge, or allow them to group themselves into tent parties and select their own captain from amongst their number. The latter way has much to recommend it. No matter in what particular 'year' the boy may be at school they will be able to keep together, and each tent group will consist of boys (including the senior) of similar scholastic status. The selection of 'our tent' by the boys generally takes place some weeks beforehand. This gives them an opportunity to formulate and carry out little schemes for satisfying their personal ambition and adding to their comfort in camp. Thus camp boxes, candle and lamp holders, stools, tracings, &c., begin to be produced. Ideas for making many articles will be

evolved from the fertile mind of a boy, particularly when each article is looked upon as suitable for furnishing a tent and adding to the general efficiency of camp.

If each tent choose its own captain, and if in some instances the choice be considered unsatisfactory by the Staff, careful watch will be necessary. As a rule boys do not make mistakes in these matters, and interference by the 'authorities' should only come in extreme cases. It may be that the selected boy is backward in school, but it is not on school-work that he is now to be judged. He may be a natural leader, and possess qualities of leadership recognized by the boys but hidden from the teacher in school. The bestowal of authority and responsibility may help such a boy in many indefinable ways. The chosen leader will be expected to maintain order in his tent and keep it clean, to report any untoward occurrence or mishap, and to see that all standing orders are complied with.

The chances of illness occurring in camp cannot be overlooked, and though the occurrence of any serious illness is extremely rare it is well to take precautions. In anticipation nothing more need be done than to make oneself acquainted with the address of the nearest medical practitioner so that in an emergency he can be consulted. Minor accidents will always happen—cuts, bruises, slight sprains, &c.—and these can be coped with if a box containing the usual 'first-aid' requisites is included in the equipment. It should be the duty of the masters to see that every boy is properly dry and warm on retiring, and if this is carefully done nothing abnormal is likely to develop. It will be thoroughly understood by all that any indisposition must be immediately reported. Constipation and diarrhoea are the commonest complaints, and it is wise to tell the boys beforehand not to be shy—as many are—but to mention the matter at once

to any of the masters, after which the trouble can, as a rule, be easily corrected. For this purpose a supply of simple correctives known to every household is useful to have at hand.

Sunday in camp will not differ very much from other days. It is undoubtedly desirable that its special character should not be allowed to pass unnoticed, and some modification of the daily time-table can be introduced. Religious observance may take the form of a visit in the morning to some local place of worship if the numbers are small, otherwise a service in the camp field may be held. The latter arrangement is strongly recommended. Hearty choral singing in the open air is a delight to everybody, and the singing of a few well-known hymns followed by a short address—a few well-chosen words from one of the Staff or a visitor—form an ideal service of thanksgiving and praise. Camp service on a sunny Sunday morning beneath the shade of the trees and with Nature's setting is a lasting memory in many minds.

Much of the routine work becomes easier year by year. After the first season the boys are no longer novices, and those who elect to go in the following years are able to put the 'freshers' into camp ways without the direct intervention of the masters. In some schools where there is an Old Students' Union or Old Boys' Society, membership of such a society entitles older boys to attend camp. In some ways this arrangement has advantages. Young boys are not always strong enough to erect the tents and handle camp equipment entirely by themselves, nor are they very competent to do so in their first year, and assistance is welcomed. Some of the Old Boys may, holidays permitting, form themselves into a valuable advance party, when they can do some of the laying out of the camp prior to the

arrival of the scholars. The one drawback to this arrangement is the presence in camp of boys of widely separated ages, a matter which has been previously discussed. Also, the members of an Old Scholars' Club, having acquired a strong taste for camping, may take over the camp for a week, and if this can be arranged they can share not only the work of erecting and of dismantling but also the expense.

If the camp is held in a neighbourhood within easy access from home a Visitors' Day may be inaugurated and, at least, tea provided. The limited state of the ordinary camp 'crockery' will not admit of any extensive demands being made upon it, as for very important reasons its quantity has been reduced to a minimum. It is usually possible to hire crockery and cutlery at a local club or Sunday school; often such articles can be obtained on payment of a small fee, provided, of course, that everything is returned whole and clean. On the other hand, should the camp be situated some considerable distance from home a Visitors' or Parents' Day is out of the question. Still, one anticipates a few visitors—perhaps a gentleman living in the neighbourhood and interested either in local educational affairs or school camps, the officers of the town or village, school inspectors, &c.—and for these provision must be made.

It has always been customary with us to pack a box labelled 'Visitors' Crockery' from the dining-room stock of the school and thereby to ensure the proper entertainment of any visitors who may chance to come. Should a Visitors' Day be included in the programme its proper organization is necessary. The following scheme is recommended:

- 2 p.m. Formal reception by the masters.
- 2.30 p.m. Camp sports

- 5 p.m. Tea; this may consist of brown and white bread and butter, cold beef, stewed fruits, cake, and biscuits.
- The older boys will act as orderlies.
- 6 p.m. Tea for boys; inspection of tents, equipment, &c., by visitors.
- 6.45 p.m. Impromptu concert and presentation of sports prizes.

The collecting together of a few books to form a small camp library is recommended. It might consist of a few easy reference books on natural objects, flowers, shells, birds, &c., together with any books of local literature which may be suitable and available. If the district is associated with any of the best English novels these books should certainly be added. The boys usually purchase small guides to objects and places of local interest which they visit, but a more extensive volume dealing fully with the camp area should be placed in the library. It may be possible to obtain books of folk-lore and stories written in the local dialect or idiom and these will lend an additional interest to the study of the English language. Not only is such a collection of books useful educationally, but it is of splendid assistance in helping to pass the time on a rainy day. A supply of well-chosen daily newspapers should not be overlooked. This period presents an excellent opportunity of getting children into the habit of reading a daily paper, a habit which is not easy to foster in the ordinary routine of school life.

Finally, no outfit is complete without a 1 in. Ordnance Survey map of the area surrounding the camp, and if anything of the nature of a continuous camp is contemplated (see page 101) a large number of the cheap form of maps issued by the Ordnance Survey Department, Southampton, may be obtained.

CHAPTER IX

CAMPS FOR SPECIAL SCHOOLS

Necessary Modifications — Proposed Curriculum.

THE present increase in the number of school camps and camp schools is indicative of their success, and they will in all probability become universal in all types of schools as their value becomes more fully appreciated. Camps have already been instituted in many Secondary and Elementary Schools, and in the new types of schools now being erected they are extremely desirable. The organization and management of camps for Day Continuation and Works Schools will differ but slightly from that of the present Day Schools. In many Day Schools camps are held during the summer holidays, so as not to interfere with the school routine, and only a percentage of the total number of scholars attends; this more particularly applies to Elementary Schools, where the tender age of some scholars prohibits them from camping on the present camp lines. In Day Continuation and Works Schools all the scholars are of camping age, they are all engaged in industrial or commercial pursuits, and their holidays are not lengthy as compared with those of a child attending an ordinary school.

In this new type of school, then, it is not a case of providing for a select and, possibly, small number of scholars, but for the whole of the pupils in attendance, so that all can enjoy the benefits of a period under canvas. To do this means either a large camp with all the pupils present simultaneously, or a small one where the pupils can attend in groups in successive weeks. As the scholars

attached to these schools will already be grouped according to the periods at which they attend, the latter method should present little difficulty to arrange. It is the opinion of the authors that large camps are not so effective as small ones owing to the weakening of corporate and social life. If the numbers are unwieldy it is difficult to get that personal touch which is such an exceedingly valuable feature of the enterprise. The difficulties of site, timetable, and curriculum are enhanced if the numbers are large, and therefore the alternative scheme of spreading the camping period over a longer time and taking the boys in small groups is recommended. Under any circumstances, whatever arrangements are made they will be to some extent dependent upon the conditions of employment in the works from which the pupils are drawn, and modifications will be made accordingly.

As far as possible, the members of each group should be of similar scholastic status, for this simplifies the time-table and the curriculum. About thirty pupils with three masters and a cook is a convenient number. Four tents for the boys and one for the staff will be required. An arrangement of this kind has been tried and found to work admirably, as the interests of all the young persons of one specific age can be catered for.

In a camp school opportunities are afforded to do some valuable practical work applicable to the boys' careers, to inculcate the qualities of true citizenship, and to cultivate a love of nature and an appreciation of the beautiful. A suitable curriculum would include work under some of the following headings :

1. Geography and Practical Mathematics—simple surveying introduces Mensuration and Trigonometry easily and rationally.

2. Literature and History—the two subjects present themselves in co-relation at several points, e.g. folklore, dialect, castle and church associations.
3. Nature Study and Scoutcraft—scoutcraft is largely 'applied nature study'.
4. Rural Economics.
5. Art—outdoor sketching.
6. Games.

In the limited time of a school camp it would be almost impossible to do anything of real value if all the subjects were attempted. The branches of study taken up should depend upon the age and ability of the group. For example, Rural Economics is a subject suitable for older boys, whereas Scoutcraft will appeal to the juniors. Practical Geography is an all-round subject and can be made adaptable to all grades of students. Much co-operative work can be done in this subject, and it introduces many useful side issues. It may be taken so far as to introduce the elements of town-planning and the question of the suitable disposition of suburbs. Elementary Surveying introduces or amplifies Practical Mathematics. A simple type of theodolite or angle-meter (either a home-made instrument or one of those on the market, e.g. Becker's), a chain and tape with perhaps a few poles, which need not be of the professional kind, are all that will be required to illustrate in a real manner the ordinary rules of Mensuration and elementary Trigonometry. At the same time a youth is taught to measure up a parcel of land, or the floor space of a building, roughly, perhaps, but with sufficient accuracy for many purposes; he also obtains a proper appreciation of a square yard, an acre, &c. A study of local geographical facts—rain-fall, mineral wealth, soil, waterways—can also be undertaken, and their influence upon the lives of the people considered.

If the site be judiciously chosen there will be scope for clothing the dry bones of history and making the subject more real and proportionately more attractive than can usually be done in school. Castles, churches, and other ancient piles are freely distributed throughout the country, and nearly all possess interesting associations, either a long historical record or connexion with some particular historical episode. Old roads and tracks, and the sites of ancient camps, &c., lend colour to the work. Folk-lore, dialect, and local music are all likewise topics of unending interest.

A course of Nature Study or Scoutcraft interests younger boys and quickens their powers of observation. In the short time spent in camp it is as well to treat Nature Study as broadly as possible, also with the assumption that the pupils are not familiar with anything in the way of text-book treatment. The habits of a few flowers, insects, and animals may be studied, but the changing beauties of the landscape, the colour effects of sunshine and shadow on moorland and pasture, hill and dale, are more valuable studies than those confined to simple biological facts. There is to all this an utilitarian side by no means to be despised. The application of flower and plant forms in design, and the harmonious blending of colour in certain constructive work may be valuable to pupils in some trades. Geology, earth sculpture, and astronomy may also be touched upon, and an attempt may be made to create a lasting interest in these subjects. They are subjects of unbounded wealth in educational possibilities, difficult to make interesting to a boy at home, yet admirable subjects in camp. Tastes differ, and if only the interest of individual scholars is aroused in some small branch of the subject, a distinct educational gain has been made.

Another matter having, perhaps, a special bearing upon

Continuation and similar schools, is a cultivation of a sense of the beautiful. The susceptible mental age of the scholars, the conditions under which many of them are employed, and the tendency of these schools to become places of utilitarian value only, render it desirable that the finer side of mental development should be emphasized. For this purpose camps are invaluable; they are held in the country away from the materialistic and, perhaps, sordid atmosphere of town life, and they place a boy in more direct contact with nature, and in an environment unsullied by industrialism. Being thus surrounded, and having the beauties and wonders of nature indicated and explained to him, the boy may become for the first time cognizant of

The dark green summer with its massive hues,
and appreciative of what the poet describes when he says—

The mists of morn in slumbering layers diffuse
O'er glimmering rock, smooth lake and spiked array
Of hedgerow thorns, a unity of grey.

He will also recognize that his daily happiness in camp is due largely to his healthy and pleasant environment.

How beautiful the world is when it breathes
The news of summer!—when the bronzy sheathes
Still hang about the beech-leaf, and the oaks
Are wearing still their dainty tasselled cloaks,
While on the hillside every hawthorn pale
Has taken now her balmy bridal veil,
And, down below, the drowsy murmuring stream
Lulls the warm noonday in an endless dream.

Once this impression is created it is difficult to efface, and it may considerably affect the future tenor of the boy's life. The beauties of Art and the glories of Literature can be brought home to a boy in no better way than by a study

of these subjects in association and by comparison with undefiled Nature.

Few places exist which do not offer material for the expression of artistic ability. Quaint objects of old-world appearance and reminiscent of bygone days form delightful studies. It may be a rustic or a pack-horse bridge, an old farm-house or wayside cottage which rivets attention and calls forth the effort. Some districts are rich in old churches and manor-houses, and these often present splendid subjects for pencil, pen, and brush—a Norman arch or doorway, an antique font or chancel screen, a tomb or traceried window.

Finally, a humorous incident in camp, committed to paper, provides material for the camp note-book.

Youths not interested in sketching might take rubbings of brasses in churches, and thus obtain unique examples of Old English lettering and phraseology. The foundations of the study of Architecture and Heraldry may thus be laid, and the taking of notes, illustrated by sketches, will serve as a stimulus to open up a new avenue of knowledge.

The abler youths would attempt more ambitious work with colour and brush—a choice bit of woodland scenery, a charming dell, the camp field, or even a sunset. The effort and the motives that prompt it are here, as in all cases, more valuable than the results.

The study of Rural Economics should prove fascinating to older youths. It forms a fitting corollary to the work previously done in History and Geography because the condition of the country-side is almost entirely a practical expression of the forces exerted by geographical conditions and historical associations. Such problems as the decline of domestic and village industries and the growth of the factory system, with the resultant depopulation of rural

areas and concentration in large towns, are worthy of study. Work of this kind will either introduce or stimulate—according to what has previously been accomplished—the study of the history of the race rather than that of the rulers of the country. Latterly the question of urban and rural allotments has been much to the fore, and this matter, coupled with that of rural transport, will provide material for numerous talks and debates. Not only are these points worthy of study in themselves, but they may be of economic interest to many working boys and girls

Games of all kinds will occupy a prominent place in the time-table, but the playing of games in the usual manner is not sufficient. The teaching of the meaning of recreation, of *camaraderie*, and of physical development and well-being, is of first importance. It is appalling to see the fatuous attempts of some youths to play; such attempts are often limited to the kicking of a ball about a street or spare piece of land. There is no attempt at co-ordinated effort—no team-work—but instead a display of selfish motives. The real sporting sense and the recreative idea are almost entirely absent, and it is with a view to overcoming these deficiencies that the games programme should be drawn up. Camp sing-songs are also another phase of the same idea. They should be encouraged; they foster a pleasant spirit of emulation and sociability, and encourage the bringing forth of latent talent.

The daily time-table for a camp doing the type of work suggested in the preceding lines may vary somewhat from that previously set forth. In fact, a point has now been reached where a digression may be made concerning the terms 'school camp' and 'camp school'. It is obvious that they are not synonymous terms. A 'school camp' implies nothing more than that it is a camp attached to

a school. Such a camp may be a means of providing a holiday under canvas for the children, and may have no organic connexion with school life or work, nor need there be any attempt to make the affair directly educational. A camp of this kind has no place whatever in the scheme expounded in this book. The underlying motive of camping as outlined in these pages is Education, and therefore the camp, as understood by the authors, is really a 'camp school'. Emphasis has been laid throughout, however, on the particular branches of education most applicable to camp purposes, because, on the other hand, a camp school might be nothing more than the transference of an ordinary school to a place under canvas which would again be a travesty of the functions of the ideal camp.

In the case of Works Schools, &c., a little more emphasis on the 'school' side may be made by some modification of the time-table. An early period each day may be devoted to study and discussion, and then the rest of the morning can be filled up with practical work, e. g. Surveying, Nature Study, Map-making. Excursions and games would then occupy the afternoons and occasionally an evening. Such a time-table would meet the requirements of boys already engaged in industrial pursuits.

Work in mills and factories has a cramping effect on a boy's mind. His earning capacity tends to become his first consideration and its expansion his ideal. To counteract this undesirable tendency should be one of the aims of the teacher. That is to say, that while not discouraging the desire for competence, opportunity should be afforded to acquire other and nobler outlooks on life. Camps can help materially in this work. They enable the teacher to present the higher and better things in a living and attractive picture and to open out to the growing mind new avenues

of thought and suggest new lines of action which, otherwise, would probably remain for ever inert. Thus influences are brought to bear which will help to produce refinement of mind and serenity of outlook—qualities so desirable to cultivate in this age of unrest.

The training of a mind to become receptive, appreciative, and discriminative, to be prudent and to possess a broad, sympathetic, and practical outlook on life, is embraced in the term 'Education'.

No means whereby these ends may be attained should be neglected, and the authors trust that after a perusal of this book the reader will recognize the value of camps in his or her sphere of educational work.

APPENDIX

THE following lists are appended for reference and as a summary of what is mentioned in the text. It is obviously useless to give quantities, nor does it follow that everything is absolutely essential; on the other hand, nothing is mentioned which will be found superfluous.

1. **General Camp Equipment:**

Tents, poles, bonnets, pegs, slides, mallets, ground-sheets, blankets.

Tables, trestles, forms, supports.

Latrine posts and boards, canvas and tacks, nuts and bolts.

Buckets, spades, pick-axe, lamps, maul, hatchet, candles, spare rope, wash-stands.

2. **Food List:**

(a) Non-perishable foods.

Tea, coffee, cocoa, sugar, salt, mustard, pepper, oat-meal, rice, peas, beans, lentils, jellies, dried fruits, pot herbs.

(b) Foods previously prepared.

Puddings, ham—roast or boiled, meat-roll, pasties (fruit, e. g. mince-meat, apple), potted beef.

(c) Perishable foods.

Bread, meat, milk, butter, eggs.

3. **Boy's Kit:**

Change of clothes, two pairs of socks, mackintosh or coat, strong boots, slippers or light shoes, blankets, hairbrush and comb, tooth-brush, soap, towel, vaseline or dubbing, enamelled mug, two enamelled plates, knife, fork, spoon, bathing-costume, stiff-backed note-book and pencil.

4. Visitors' Box :

Cups and saucers, small plates, large plates, knives, forks, spoons, dessert spoons, teapot, cream jug, and sugar basin.

5. Tool Kit :

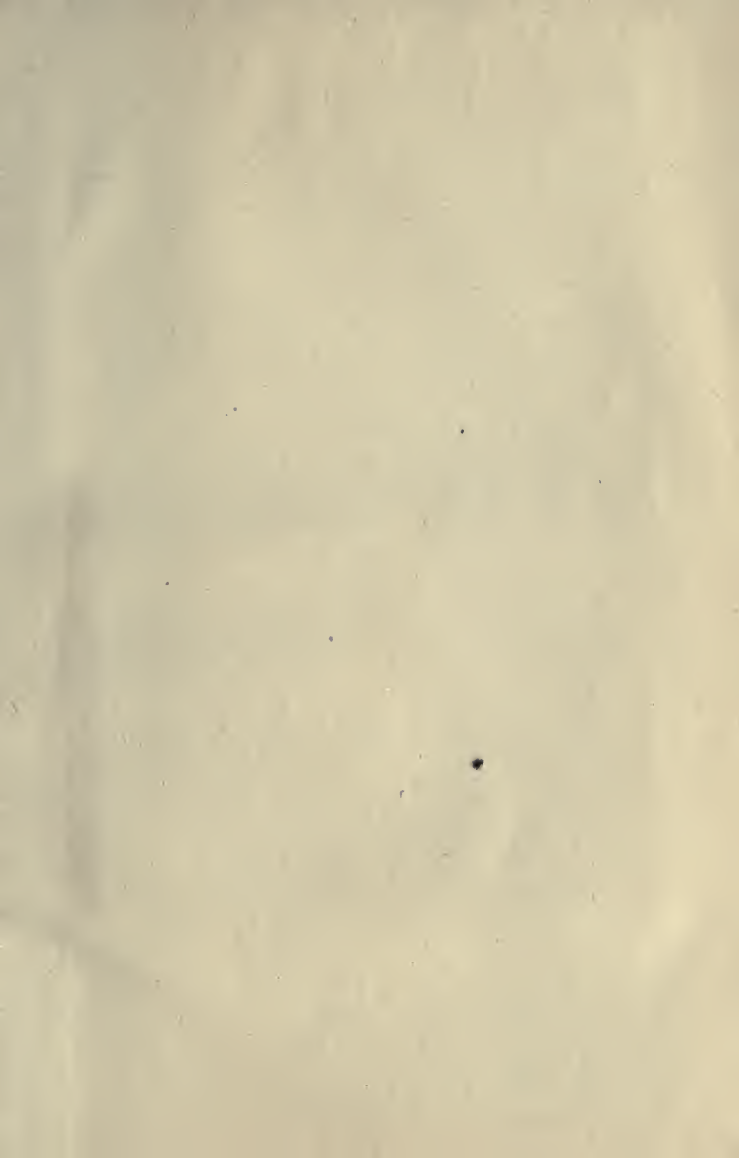
Hammer, saw, chisels, pincers, pliers, screwdriver, brace and bits, spanner, supply of nails and screws.

6. Cleaning Kit :

Flue brush, blacklead and brush, scrubbing brushes, pan brush, dish cloths, floor cloths, supply of soda, soft soap, hard soap, tin of disinfectant.

7. First-aid Box.**8. Sports Kit :**

Bats, balls, wickets, football, &c.



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